

FIG. 1

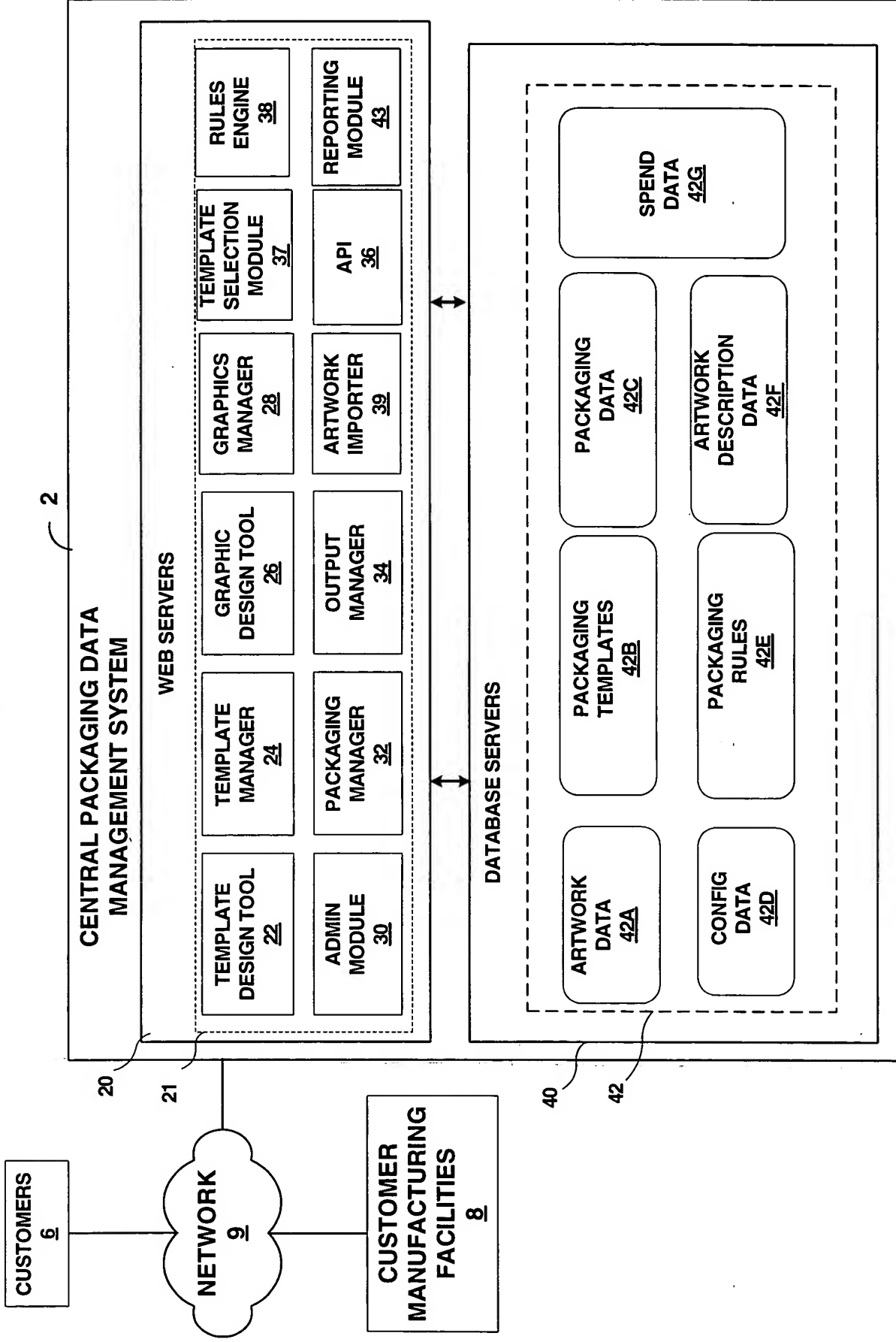


FIG. 2

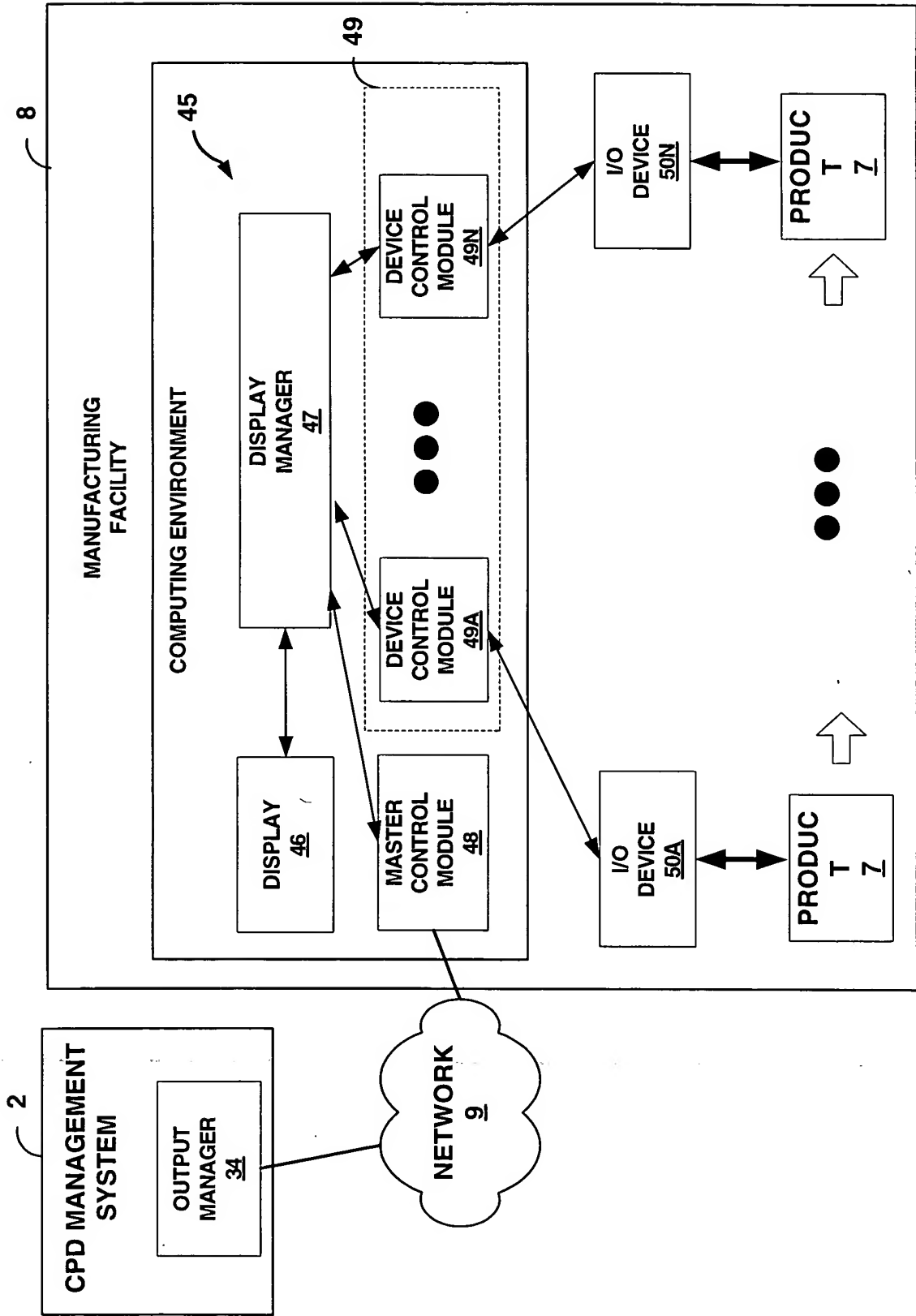


FIG. 3

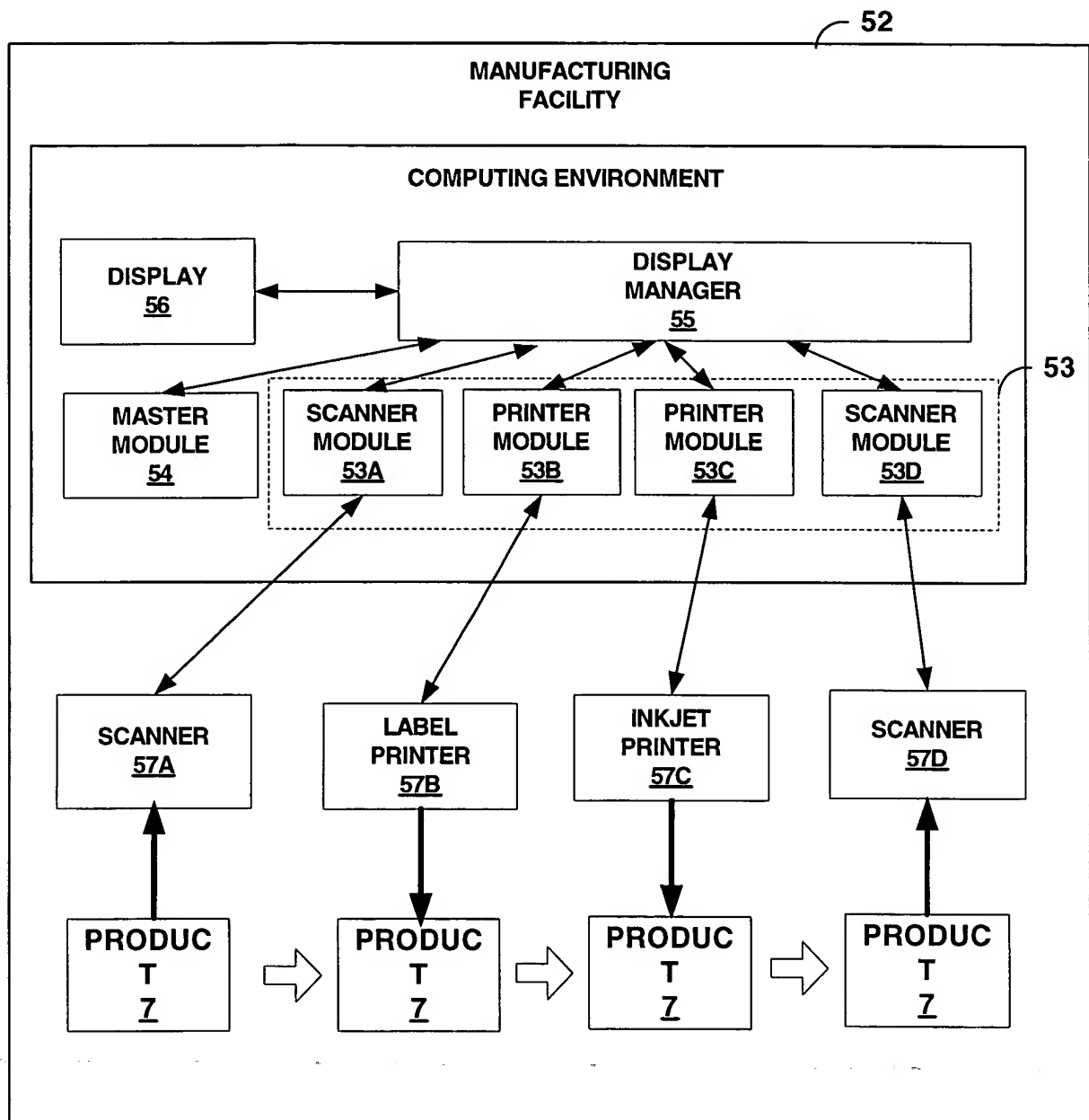


FIG. 4

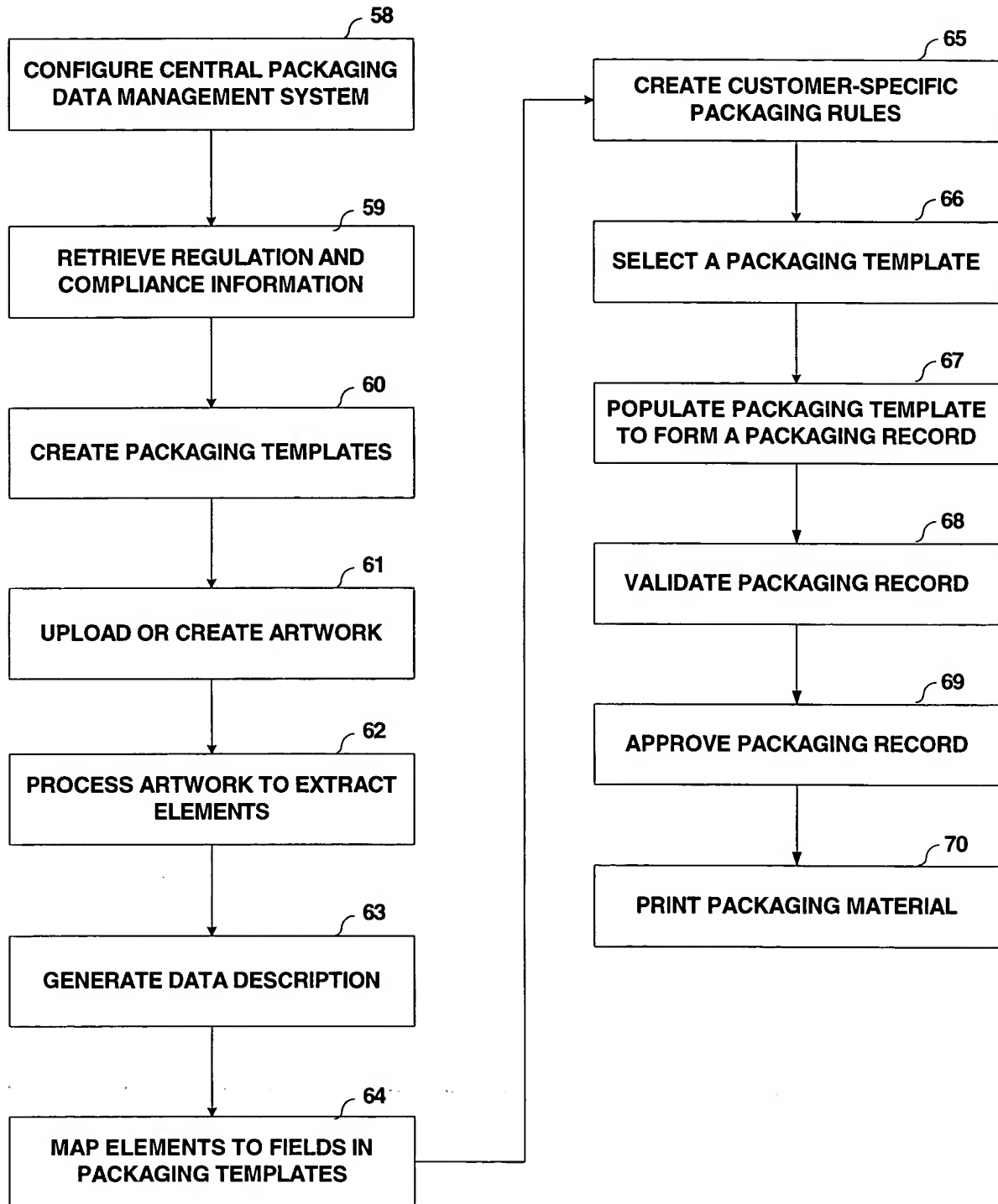


FIG. 5

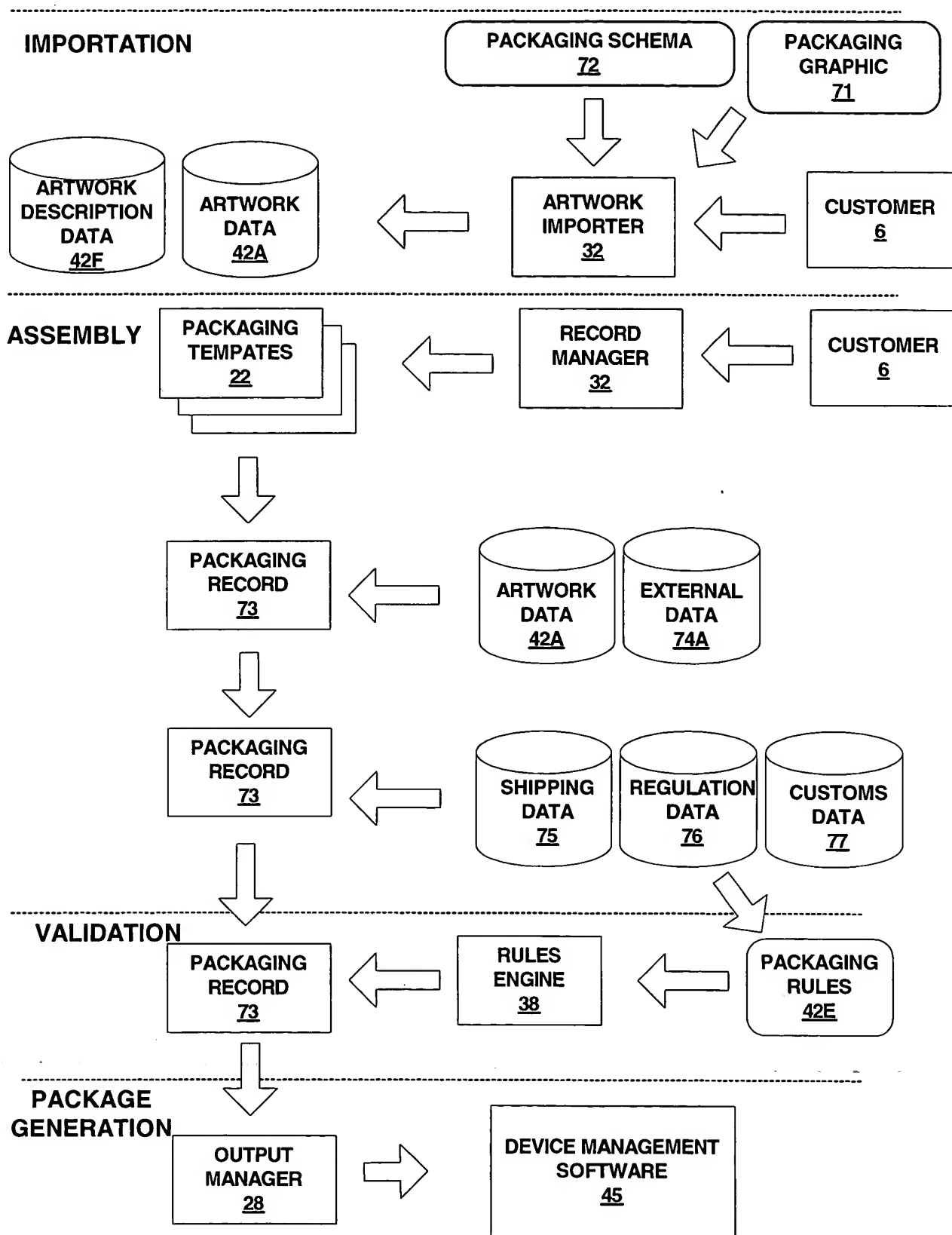


FIG. 6

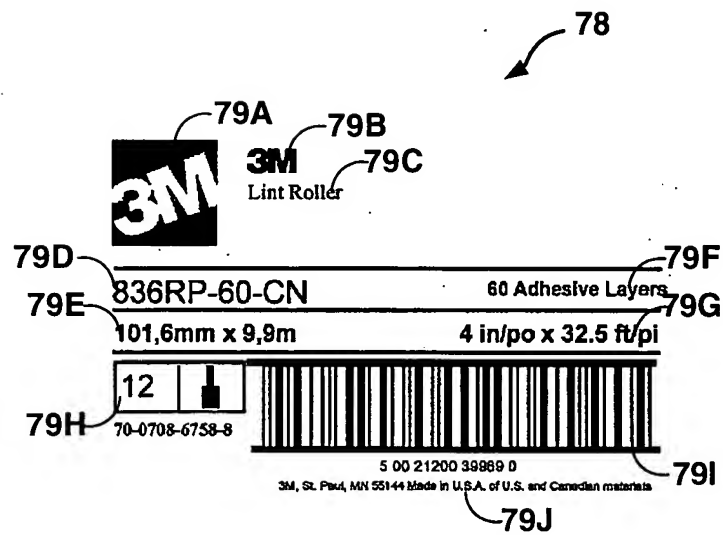


FIG. 7

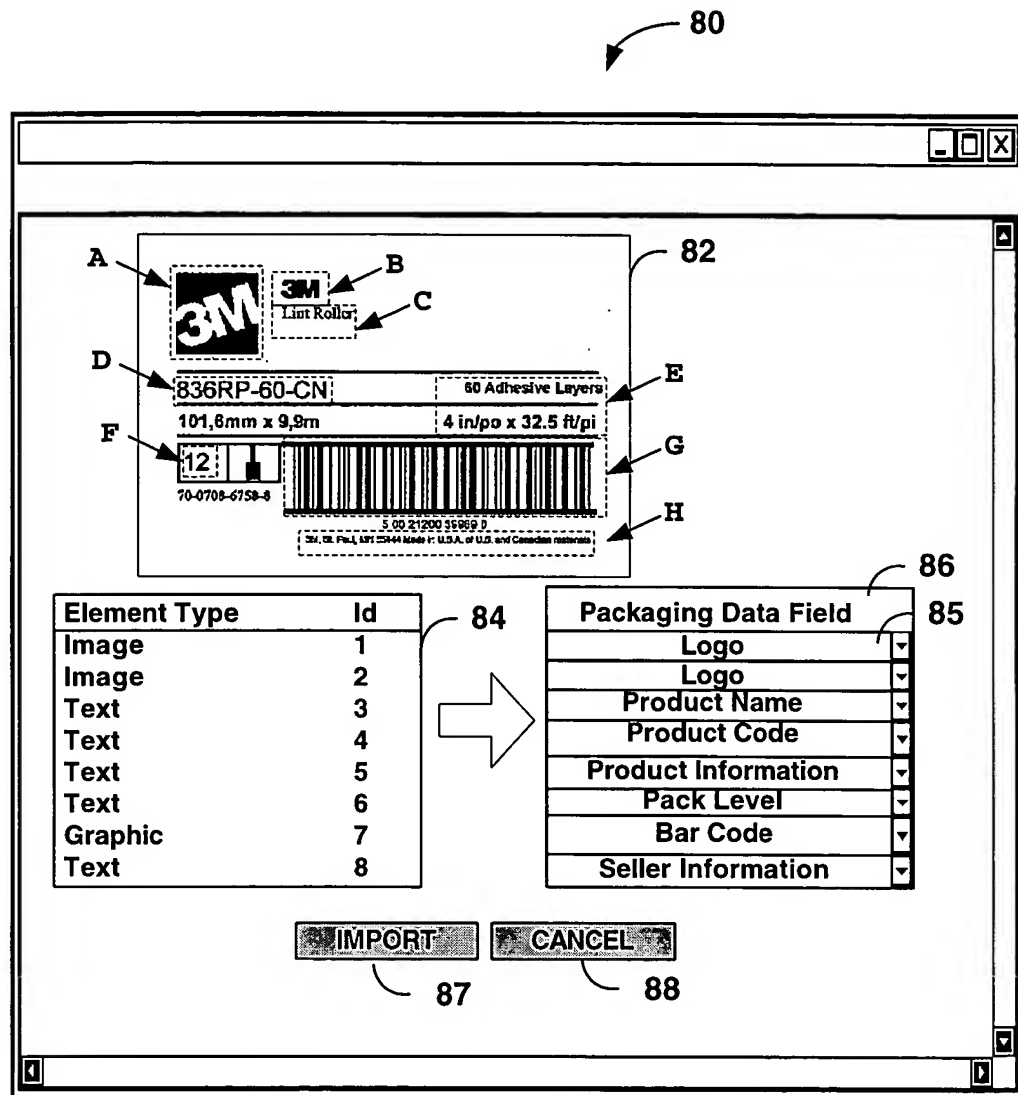


FIG. 8

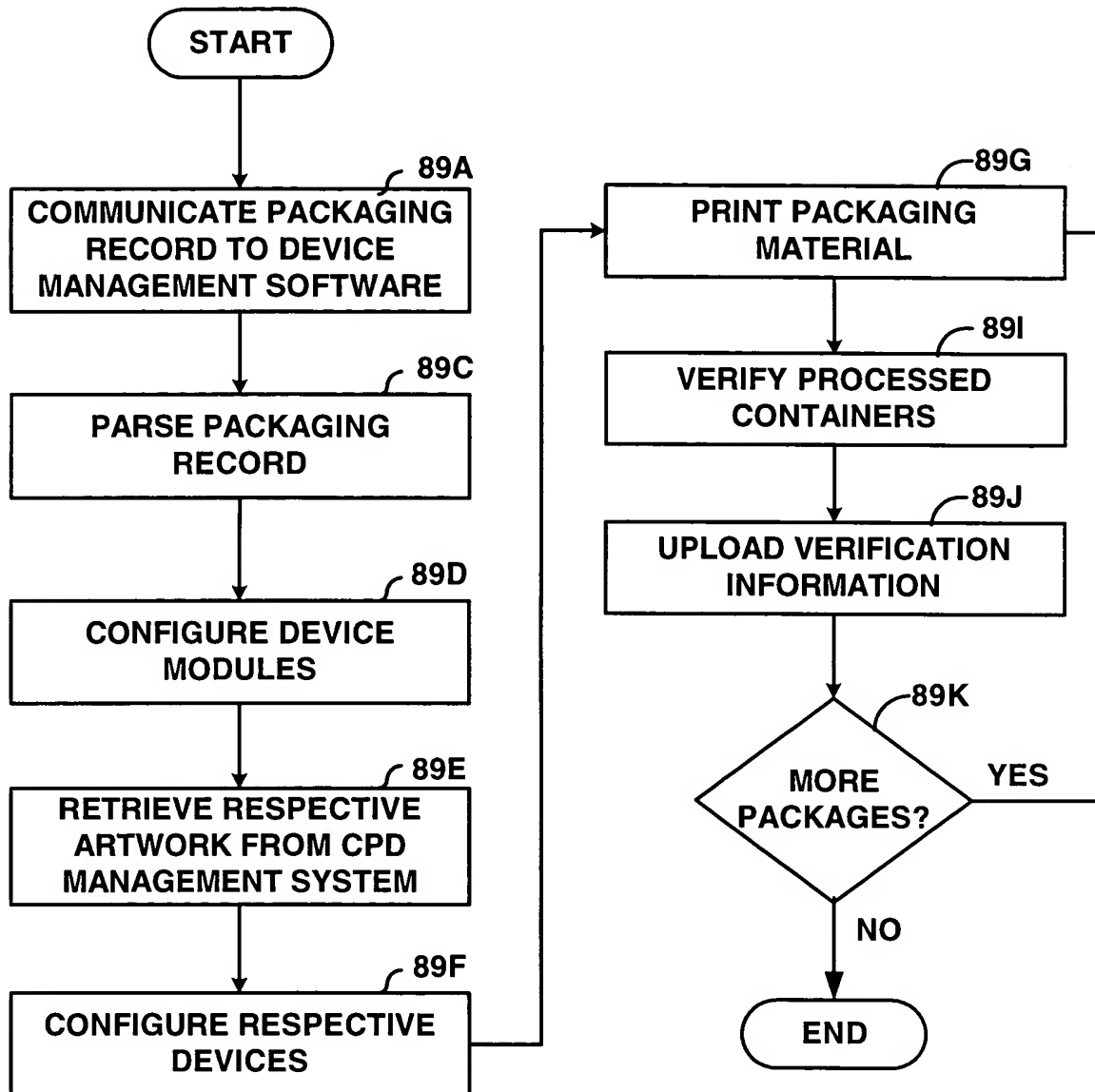


FIG. 9

Case No.: 59052US002

TEMPLATE MANAGER

FIG. 10

GRAPHICS MANAGER

93

Central Labeling Database Graphics Management

3M Package Engineering

Central Labeling Database

CLD Graphics Management System

Control Panel

94 Add 99 Approve Change Save Cancel

Graphic Data

100 Status Date of Entry Date Approved Trustee Superseded by

Unique Graphic ID: 1234 Name: Corporate Logo

96 Description: Flying Wings Corporate Logo

Categories: ☐ Pack Level ☐ Logo ☐ Symbol

97 Source Path And Filename: J:\Logos\flyingswings.jpg Browse

95 Search: Enter a graphic name: Search Clear Results

Results

Name	Id Number	Status
[Empty Table]		

Graphics Viewer

98 [Empty Viewer]

FIG. 11

First Named Inventor: Mary K. Kroening
Case No.: 59052US002
Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

PACKAGING
MANAGER

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

Main Menu

Need Help?

Functions

LookUp Options

CLD Key Fields

Product

Pack Level

Template/Part

Graphics

Translations

102

103

104

105

106

107

108

108A

110A

110B

110C

139

Part

Status

3M ID

Label/Pack Level

Unique Label ID

Shipper

Non Pass Through Product

Power Brand Name

Product Description

Notes

Generic Name

Cal Number

Business Unit

Expiration Days Offset

TradeMark Names

Origin / Addresses Data

Free Text Data

FIG. 12

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

PACKAGING MANAGER

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

Main Menu

Need Help?

Functions

New Record

Query Record

Change Record

Save Changes

Approve Pending

Cancel

Lookup Options

☒ 3M ID

☐ Unique Label ID

CLD Key Fields

3M ID

70-0160-6829-1

Label Pack Level

(6) Shipper

Status

Approved

Unique Label ID

38-7000-0028-4

Non Pass Through Product

Product

Pack Level

Template/Part

Graphics

Translations

Country Of Origin

Country Of Origin

Made in the U.S.A.

Made In Translations

#1 French

#2 Latin American Spanish

#3

#4

#5

#6

Addresses

#1 3M St Paul

#2

#3

#4

#5

#6

Main Product Data

Origin / Addresses Data

Free Text Data

112

114

116

110B

FIG. 13

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

PACKAGING MANAGER

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

New Record

Query Record

Change Record

Save Changes

Cancel

Approve Pending

Lookup Options

☒ 3M ID

☐ Unique Label ID

CLD Key Fields

3M ID

70-0160-6829-1

Label Pack Level

(6) Shipper

Part

38-7000-0028-4

Status

Approved

Unique Label ID

38-7000-0028-4

Non Pass Through Product

Translations

Product

Pack Level

Template/Part

Graphics

1

2

3

4

5

6

7

8

9

Billing Unit

122

Pack Level Detail Data

Quantity

15

In Icon

Per Icon

Imperial Dimensions

1.5 in/po x 2 in/po

Metric Dimensions

38.1 mm x 50.8 mm

Imperial Weight

Metric Weight

Barcode Symbolology

Interleaved 2of5

Barcode Content

5002120071965

120

PACK OUT-LINE SUMMARY:

12

3

36

124

(3) Intermediate Pack-1

(6) Shipper

(6) Billing Unit

FIG. 14

PACKAGING
MANAGER

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

Main Menu

Need Help?

New Record

Query Record

Change Record

Save Changes

Cancel

Approve Pending

Lookup Options

3M ID

Unique Label ID

108C

CLD Key Fields

3M ID

70-0160-6829-1

Label Pack Level

[6] Shipper

Part

Approved

Status

Approved

Unique Label ID

38-7000-0028-4

Non Pass Through Product

Product

Pack Level

Template/Part

Graphics

Translations

Template Key Data

Pack Level

[6] Shipper

Part

[6] Shipper

Status

Approved

Template Lookup

☒ Non Business Unit

☐ Non Market

☒ [6] Shipper

Templates

Post It Shipper

View Label

126

130

128

Scotchgard™

3M™

hkl

Griffin's resolution

23245

3in X 3in

12

12

70-0061-7733-4

01-11-01

FIG. 15

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

Main Menu

Need Help?

Functions

New Record

Query Record

Change Record

Save Changes

Cancel

Approve Pending

Lookup Options

☒ 3M ID

☐ Unique Label ID

108D

CLD Key Fields

3M ID

70-0160-6829-1

Label Pack Level

(6) Shipper

Part

Approved

Status

Unique Label ID

38-7000-0028-4

Non Pass Through Product

Product

Pack Level

Template/Part

Graphics

Translations

Label Graphic Symbols

134

Pack Level

(6) Shipper

Part

Add

Change

Delete

Field Name

Graphic Field 1

Graphic Field 2

Category

Logo

Logo

Choice

3M Super Logo graphic

Post It Logo

132

FIG. 16

FIG. 17

OUTPUT
MANAGER

140

Central Labeling Database Output Module

3M Package Engineering

Central Labeling Database

Print Labels View Approved Labels CLD Help

Label Search

Data Source ☐ Local Data Source ☒ Central Data Source

Search By: ☒ 3M ID Number ☐ Unique Label ID

3M ID: 70-0160-3745-2

Pack Level: [6] Shipper

Part: .

Look Up

142

144

FIG. 18

Case No.: 59052US002
Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

140

FIG. 19

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

OUTPUT MANAGER

140

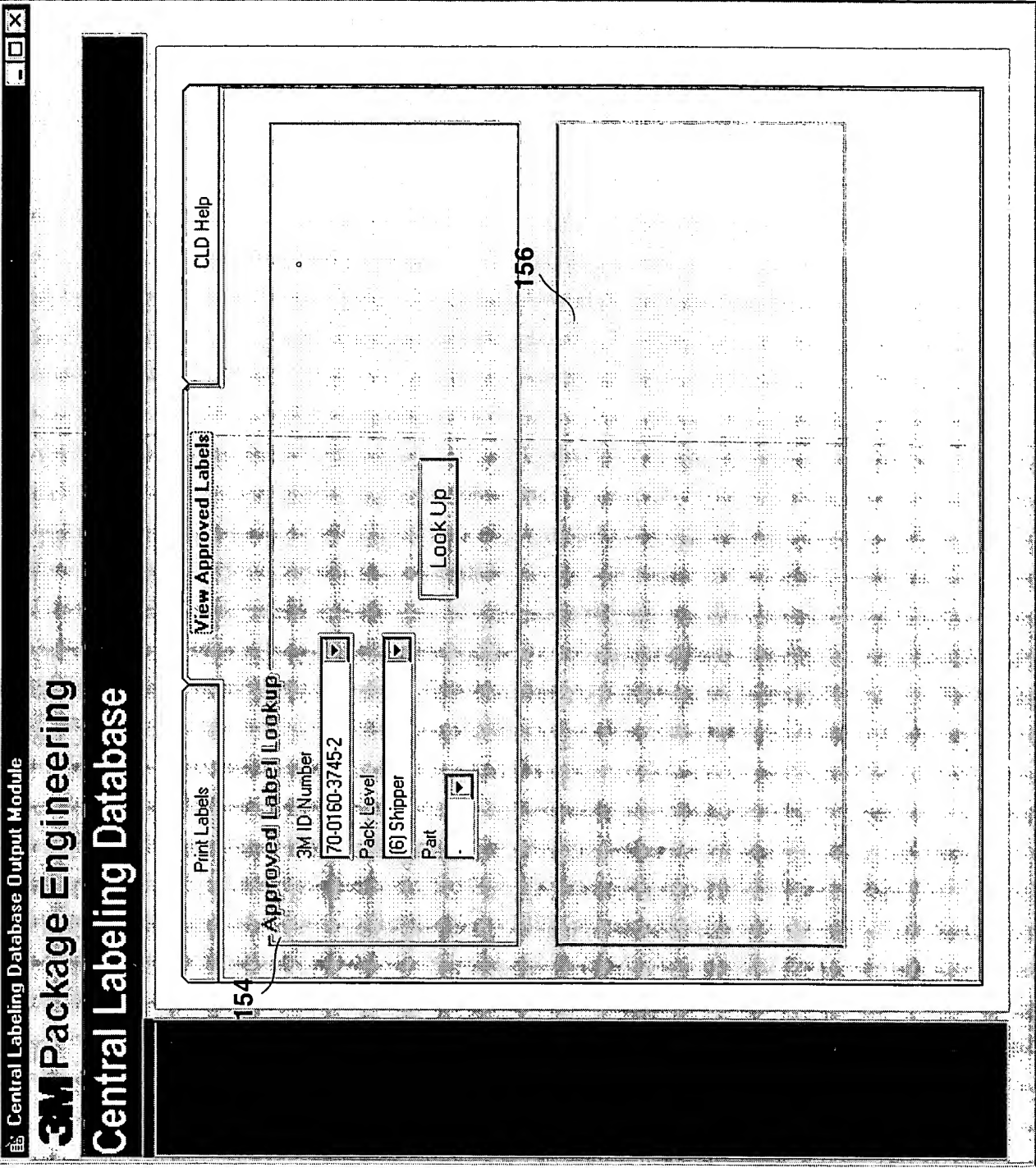


FIG. 20

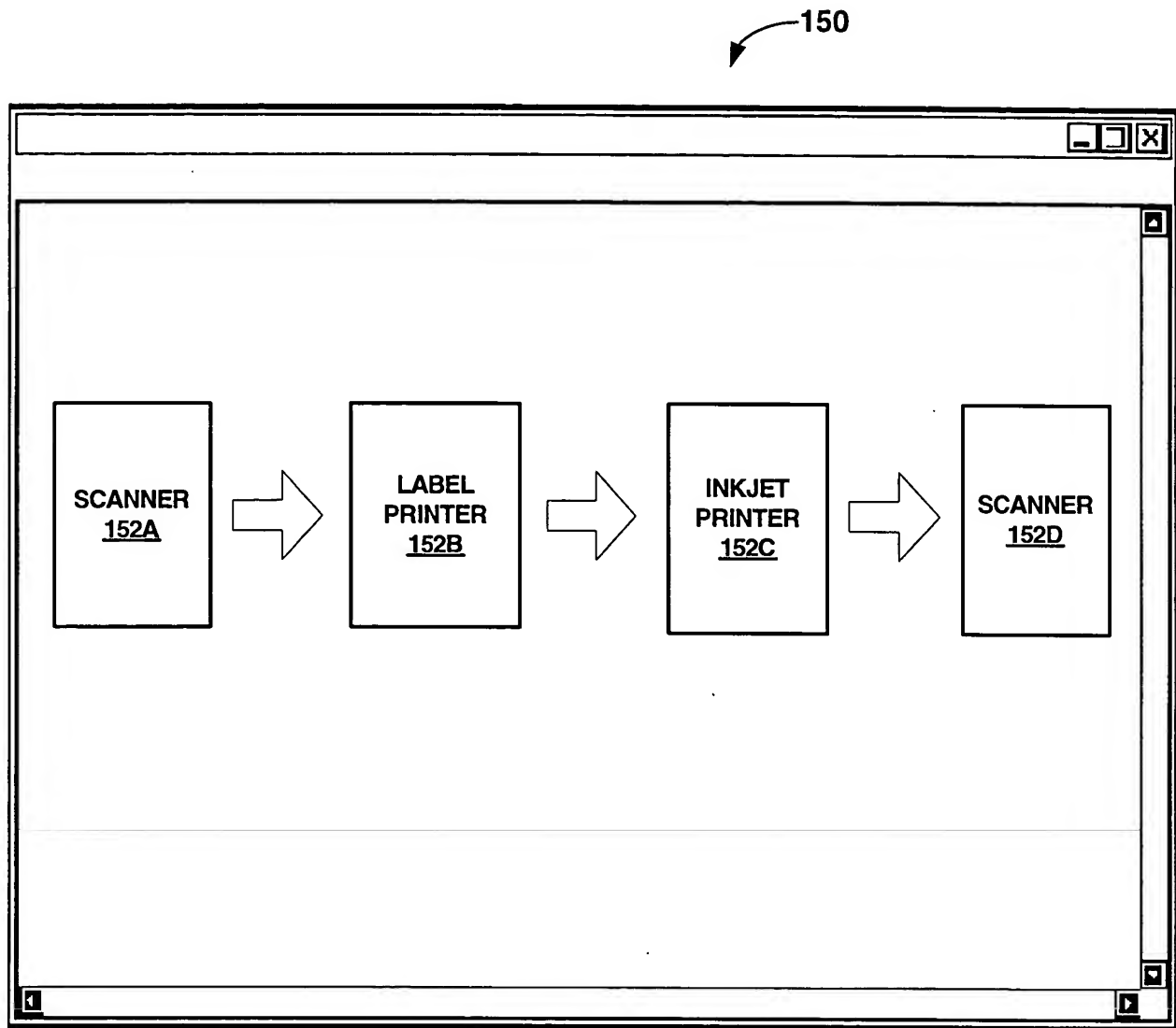


FIG. 21

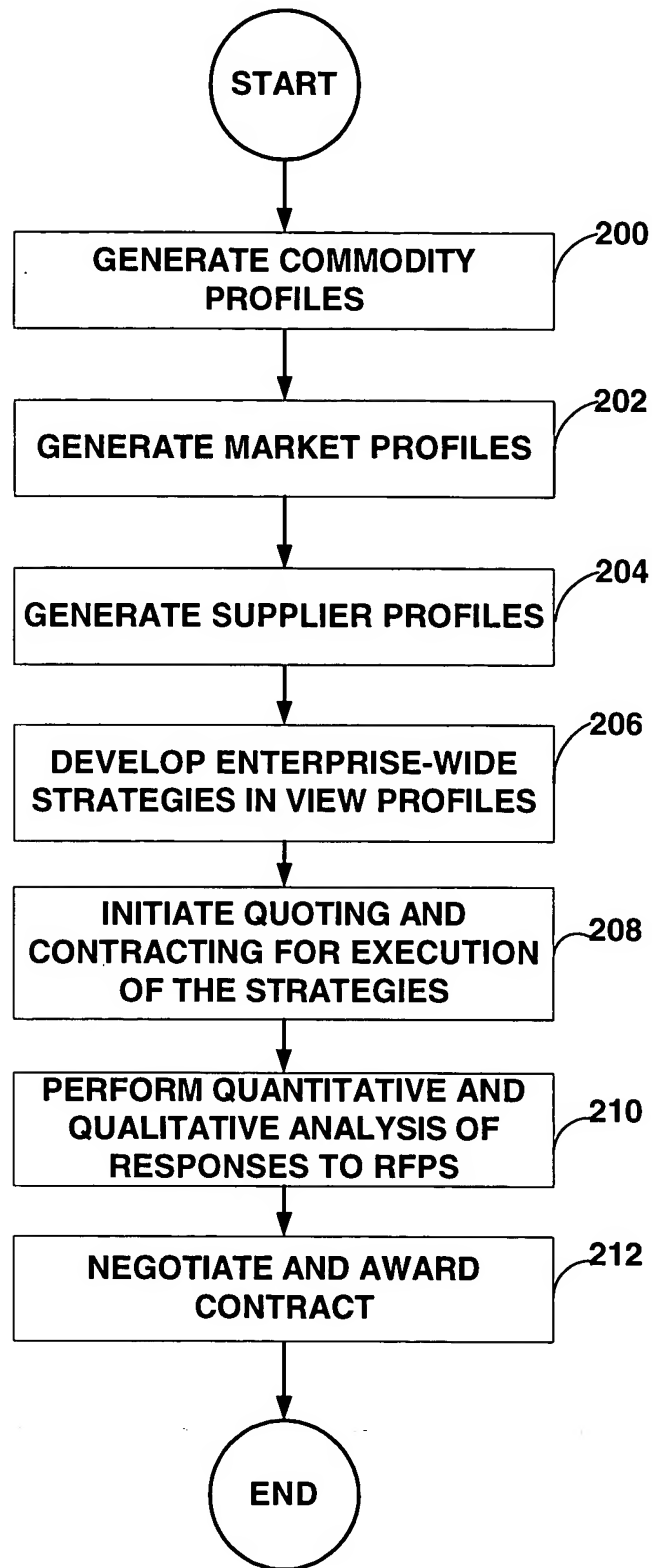


FIG. 22

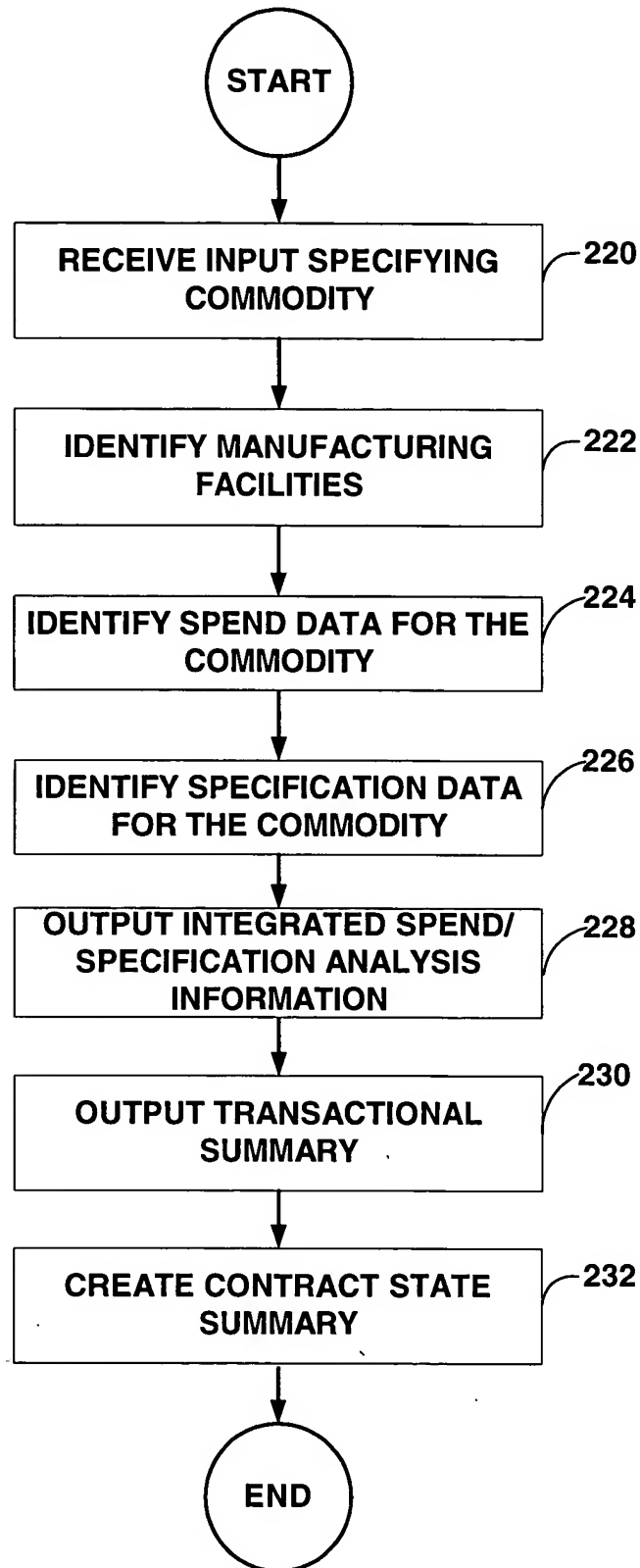


FIG. 23

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

240

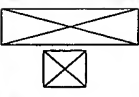
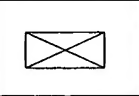
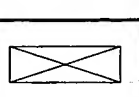

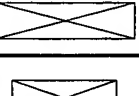
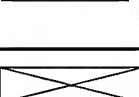
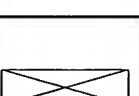
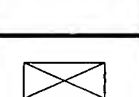

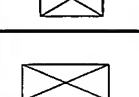
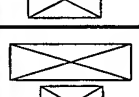
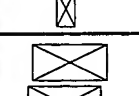
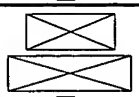
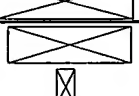

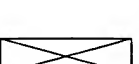
Specification Data										Purchase Order History Data									
																			
300069	RSC	13.81	5.87	6.81	ECT 26	Kraft	C Flute	1 color	t1234	280,000	0.25	\$70,000	1111	Plant B	Supplier 1				
300070	Die Cut	7	7	8	200#	Bleached White	B Flute	No Print	t1235	320,000	0.80	\$256,000	2222	Plant A	Supplier 2				
300071	FOL	13.4	10	13.75	ECT 32	Kraft	C Flute	2 color	t1236	5000	2.08	\$10,400	3333	Plant A	Supplier 3				
300073	RSC	10	10	10	200#	Kraft	C Flute	1 color	t1237	11,000	0.38	\$4,180	4444	Plant C	Supplier 2				
300074	RSC	10	10	10	ECT 32	Kraft	E Flute	1 color	t1238	160,000	0.26	\$41,600	5555	Plant B	Supplier 3				
300075	RSC	13.81	5.87	6.81	ECT 26	Kraft	E Flute	1 color	t1239	25,000	0.84	\$21,000	6666	Plant B	Supplier 2				
300076	Die Cut	13.4	10	13.75	150#	Mottle White	C Flute	1 color	t1240	500,000	0.15	\$75,000	7777	Plant C	Supplier 3				
300077	RSC	12	12	12	ECT 26	Bleached White	C Flute	1 color	t1241	85,000	0.50	\$42,500	8888	Plant C	Supplier 1				
300078	Die Cut	13.4	10	13.75	ECT 26	Bleached White	E Flute	2 color	t1242	7000	1.65	\$11,550	1234	Plant B	Supplier 1				
300079	RSC	13.81	5.87	6.81	ECT 32	Mottle White	B Flute	No Print	t1243	38,000	0.85	\$32,300	2345	Plant B	Supplier 3				
300080	RSC	23.75	5.5	23.12	150#	Kraft	C Flute	No Print	t1244	3000	0.88	\$2,640	3456	Plant B	Supplier 2				
300081	RSC	13.81	5.87	6.81	150#	Kraft	C Flute	2 color	t1245	5000	1.39	\$6,950	4567	Plant B	Supplier 3				
300082	Die Cut	7	7	8	ECT 26	Mottle White	E Flute	1 color	t1246	135,000	0.28	\$37,800	5678	Plant A	Supplier 1				
300083	RSC	13.81	5.87	6.81	ECT 32	Kraft	B Flute	1 color	t1247	30000	0.55	\$16,500	6789	Plant A	Supplier 2				

FIG. 24

242

Sum of Total Invoice \$	Supplier	Supplier	Supplier	Grand Total
Material	1	2	3	Total
Bleached White	\$54,050	\$256,000	\$126,000	\$436,050
Kraft	\$70,000	\$44,320	\$76,450	\$190,770
Mottle White	\$37,800	\$36,000	\$107,300	\$181,100
Grand Total	\$161,850	\$336,320	\$309,750	\$807,920

244

Sum of Total Invoice \$	Site Location	Plant B	Plant C	Grand Total
Material	Plant A			
Bleached White	\$256,000	\$11,550	\$168,500	\$436,050
Kraft	\$44,400	\$142,190	\$4,180	\$190,770
Mottle White	\$37,800	\$32,300	\$111,000	\$181,100
Grand Total	\$338,200	\$186,040	\$283,680	\$807,920

FIG. 25

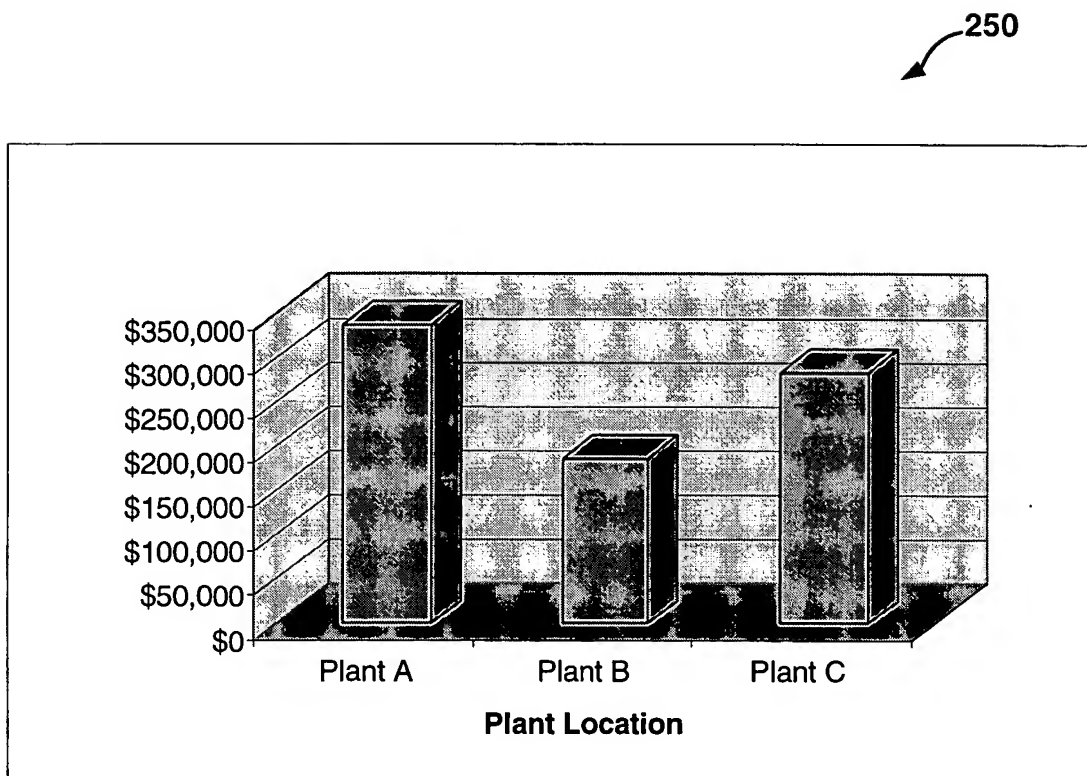


FIG. 26

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

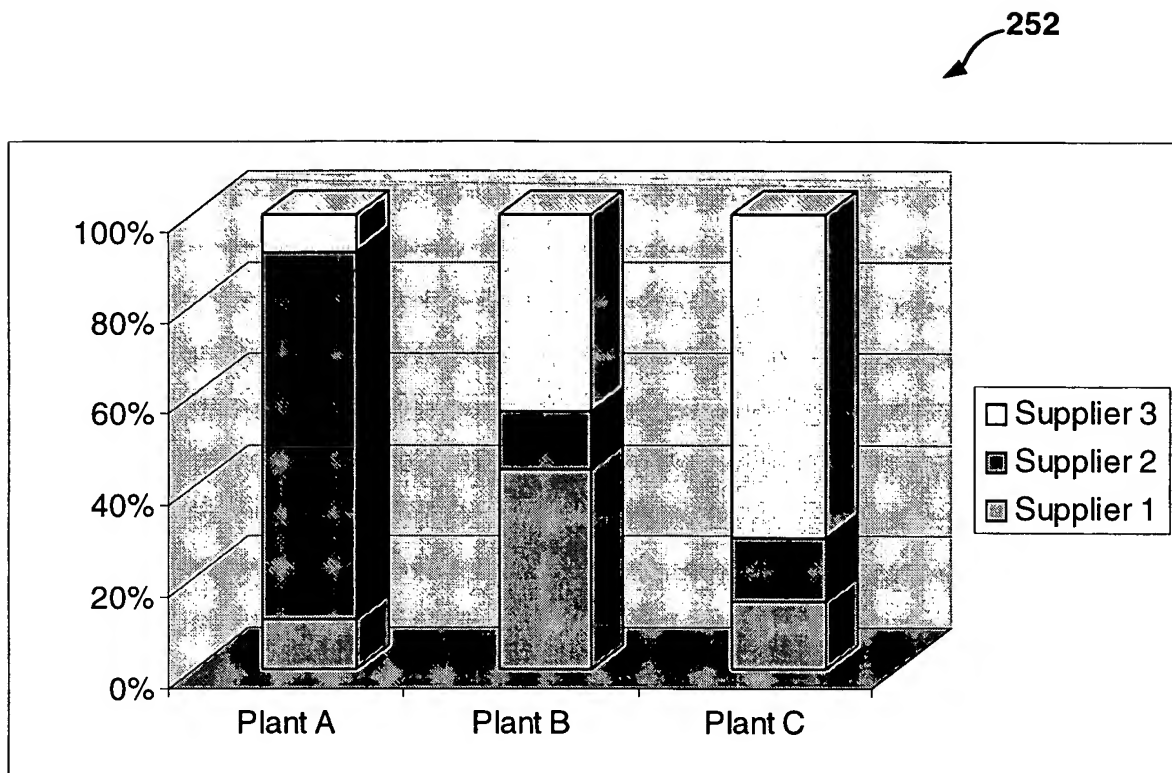
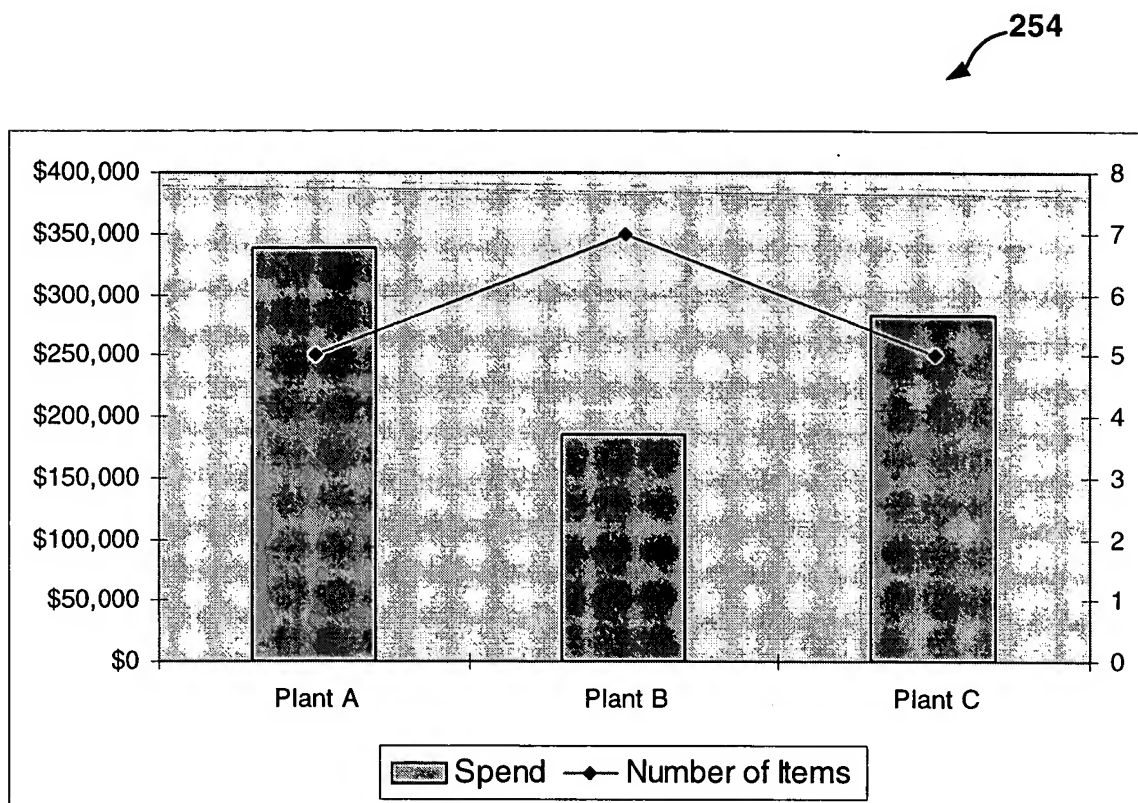


FIG. 27



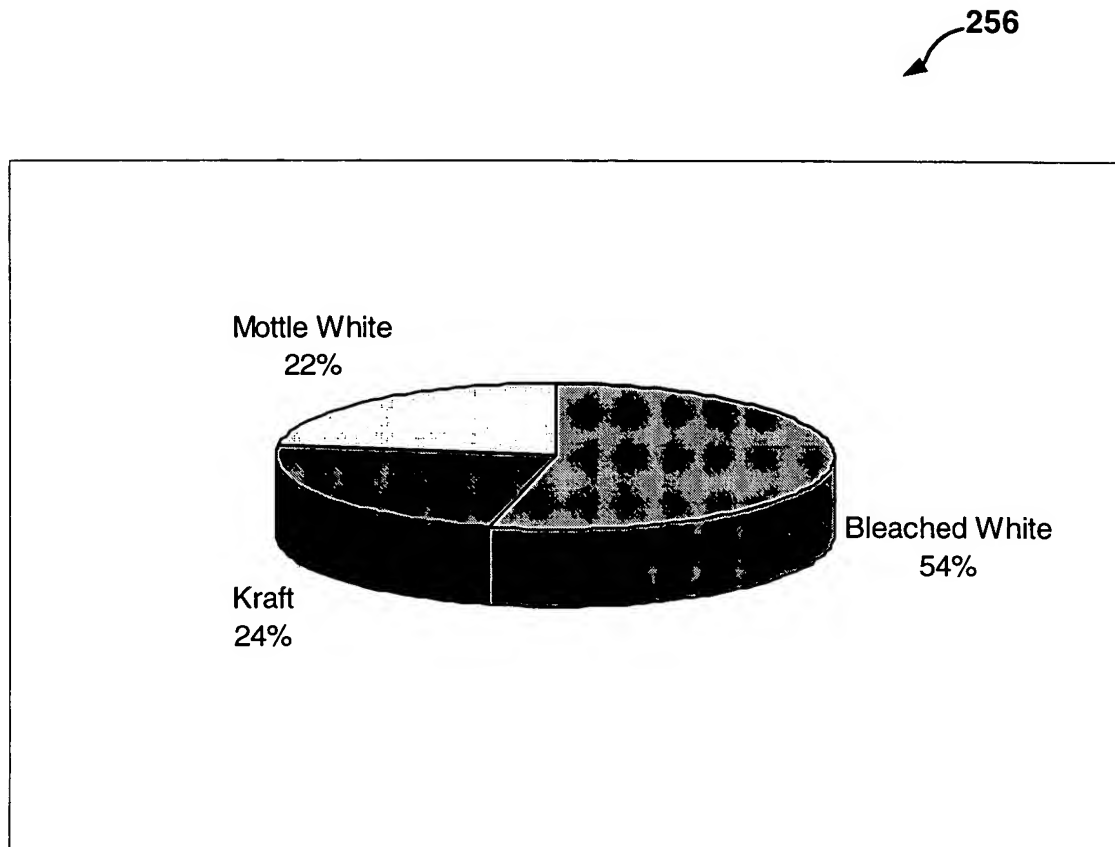


FIG. 29

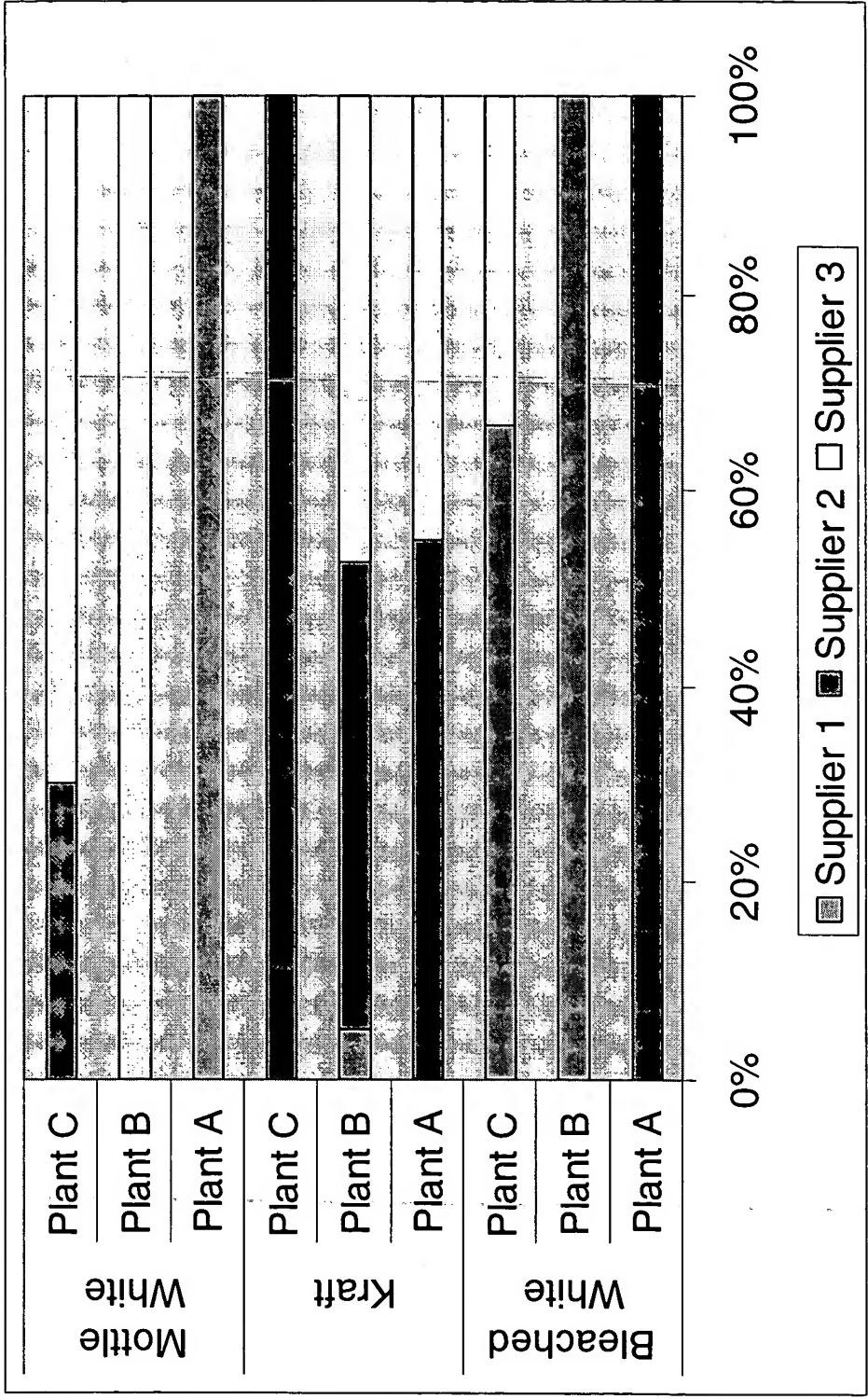


FIG. 30

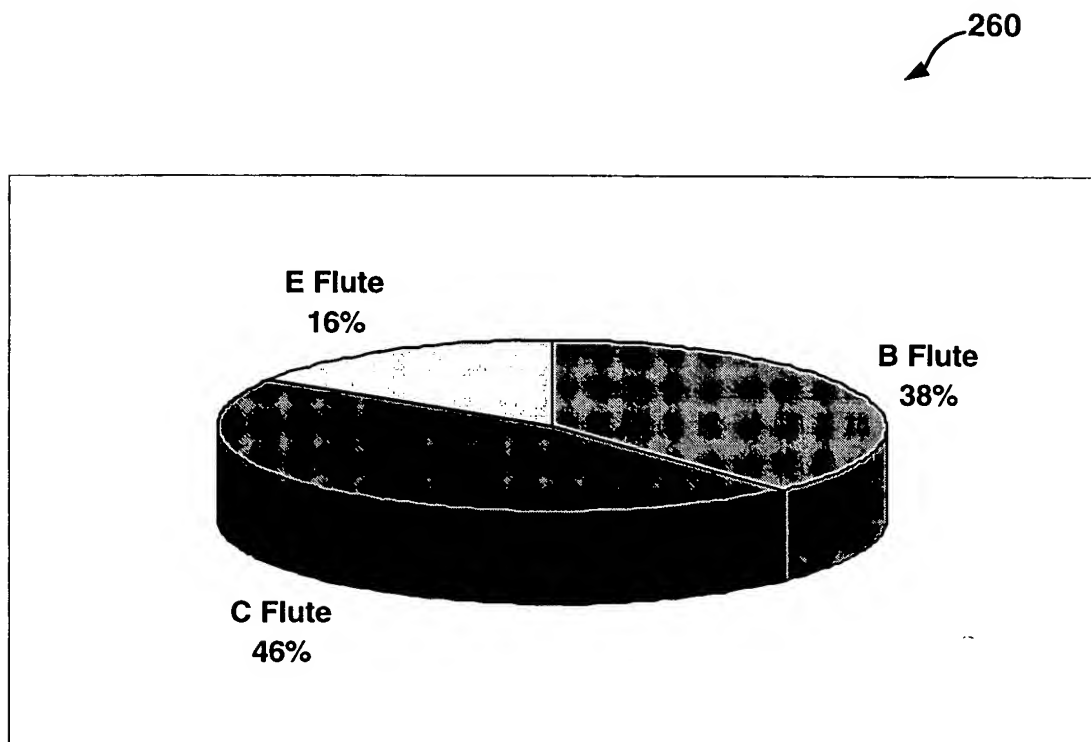


FIG. 31

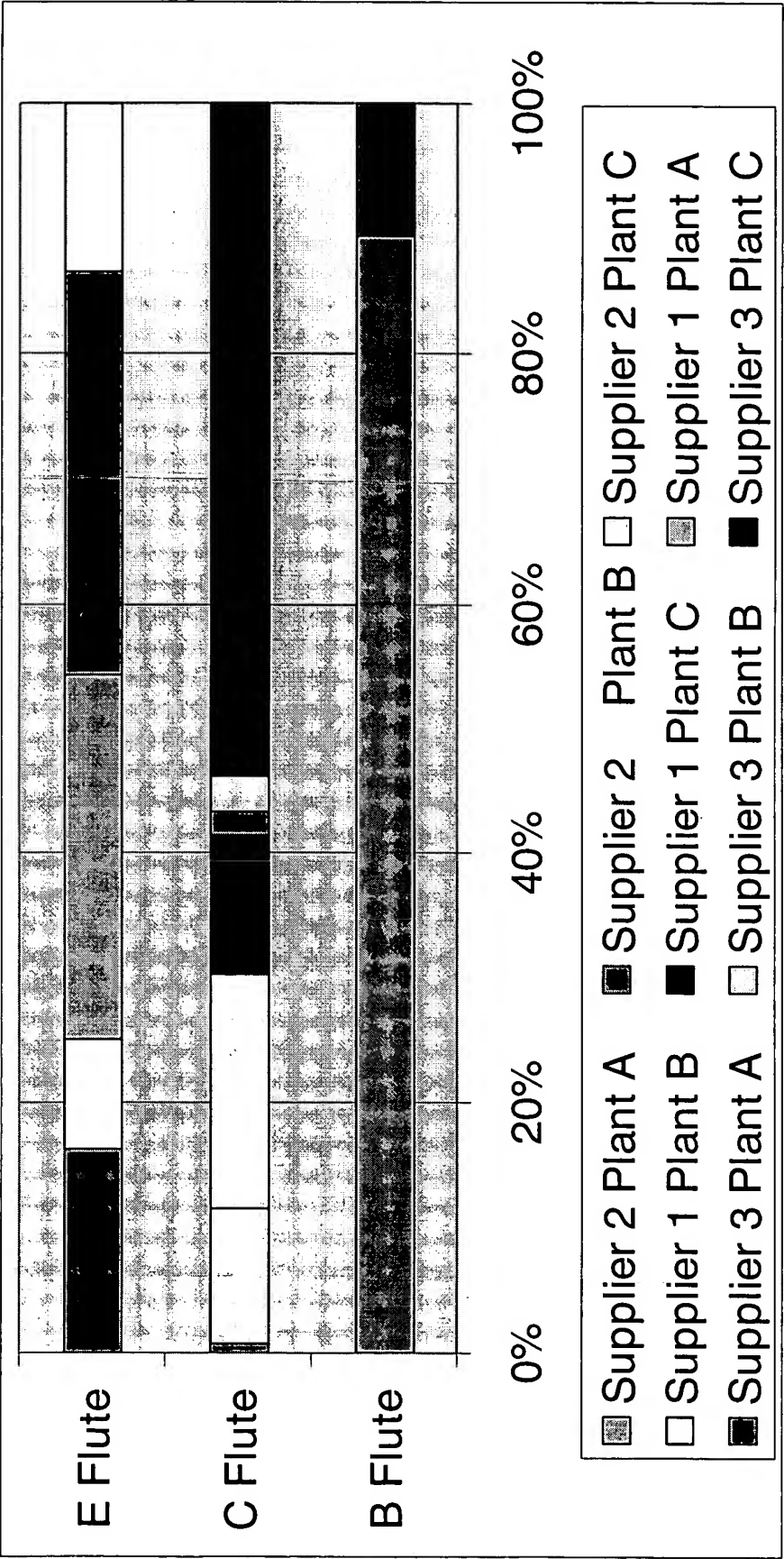


FIG. 32

264

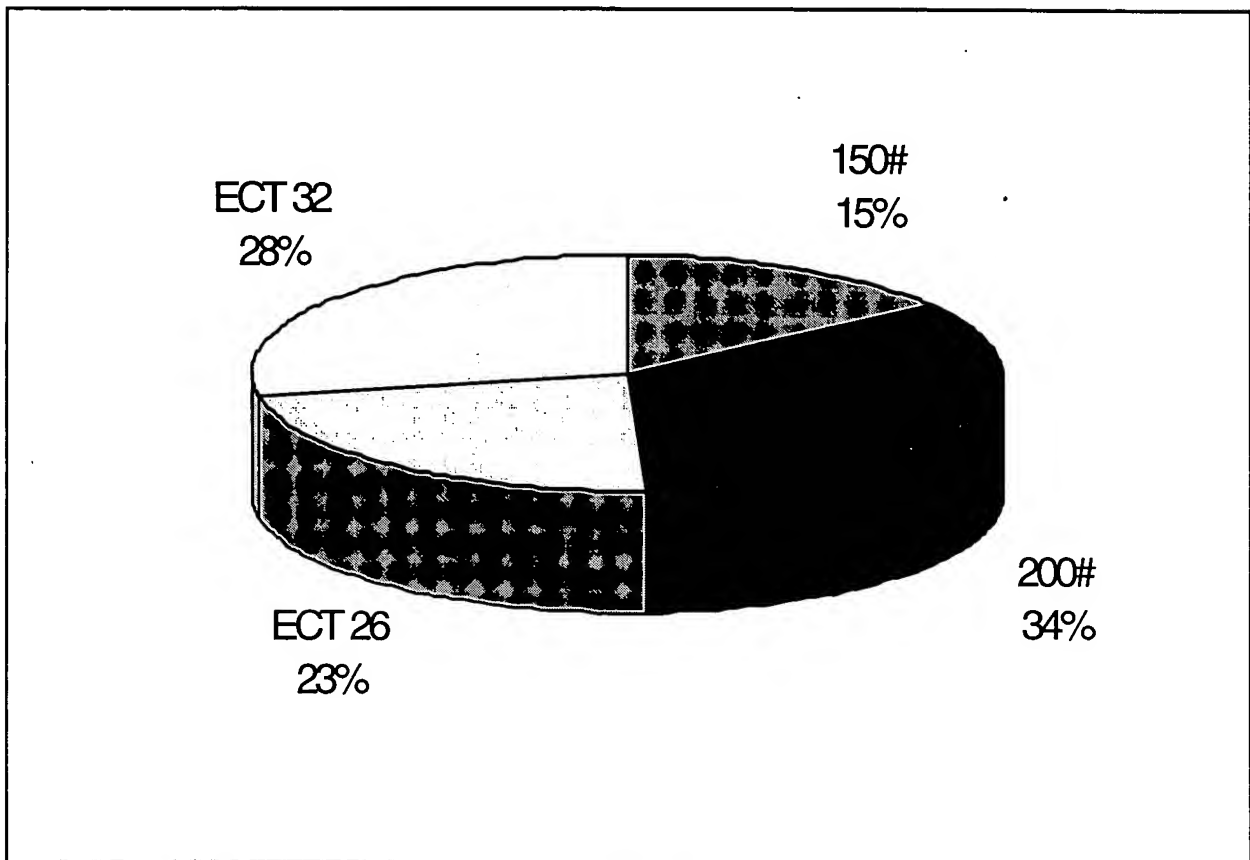


FIG. 33

266

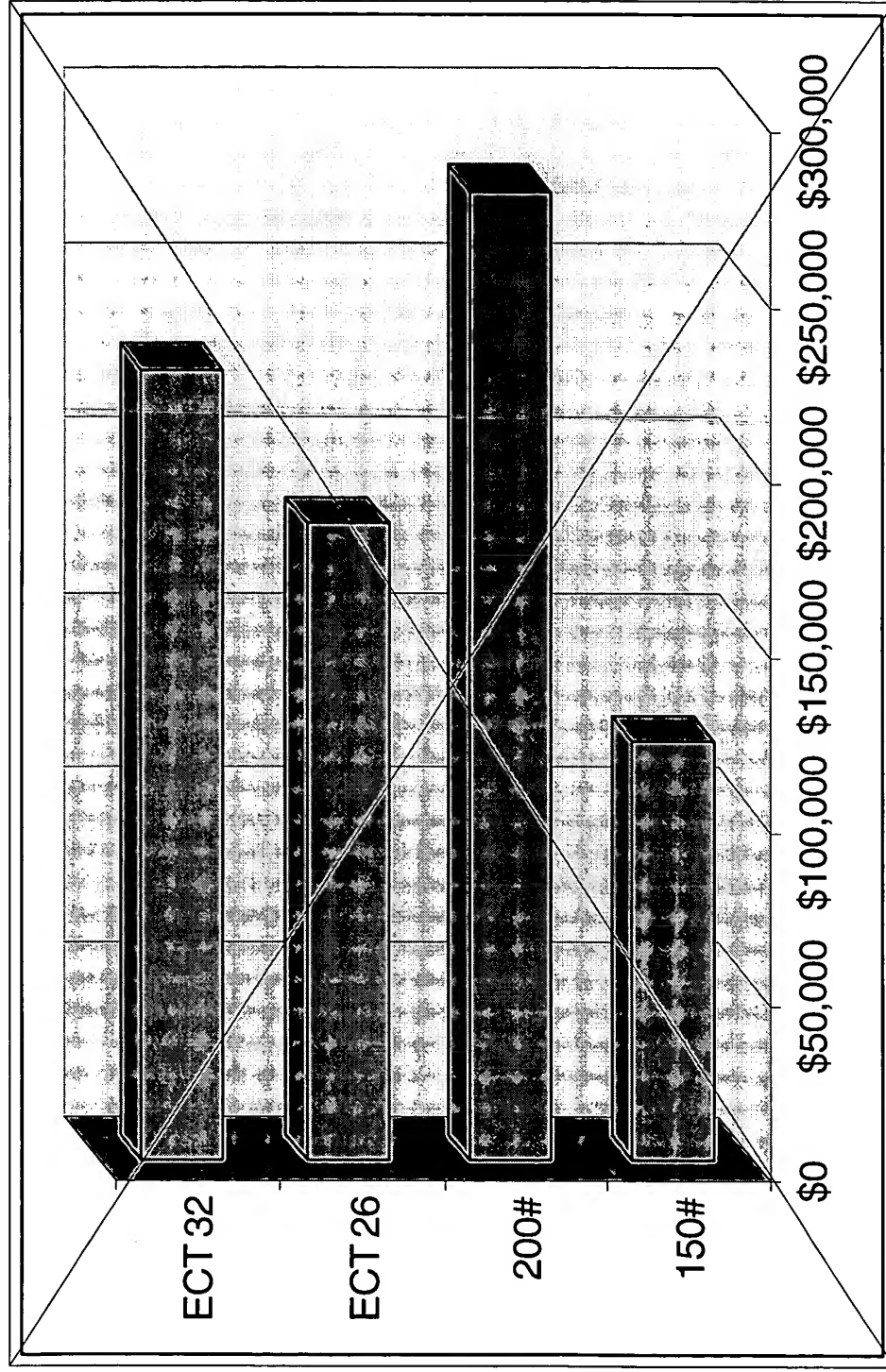


FIG. 34

268

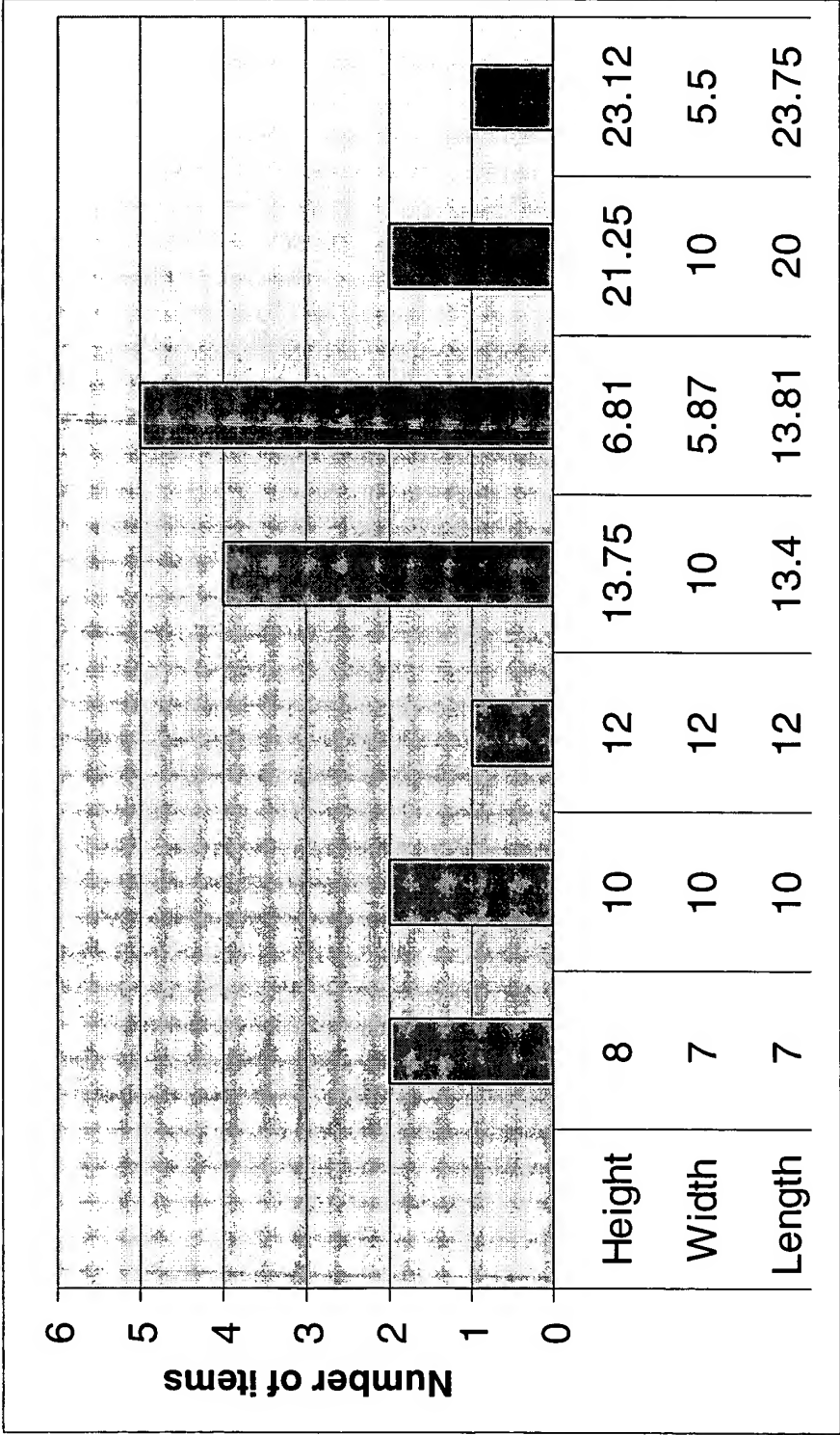


FIG. 35

270

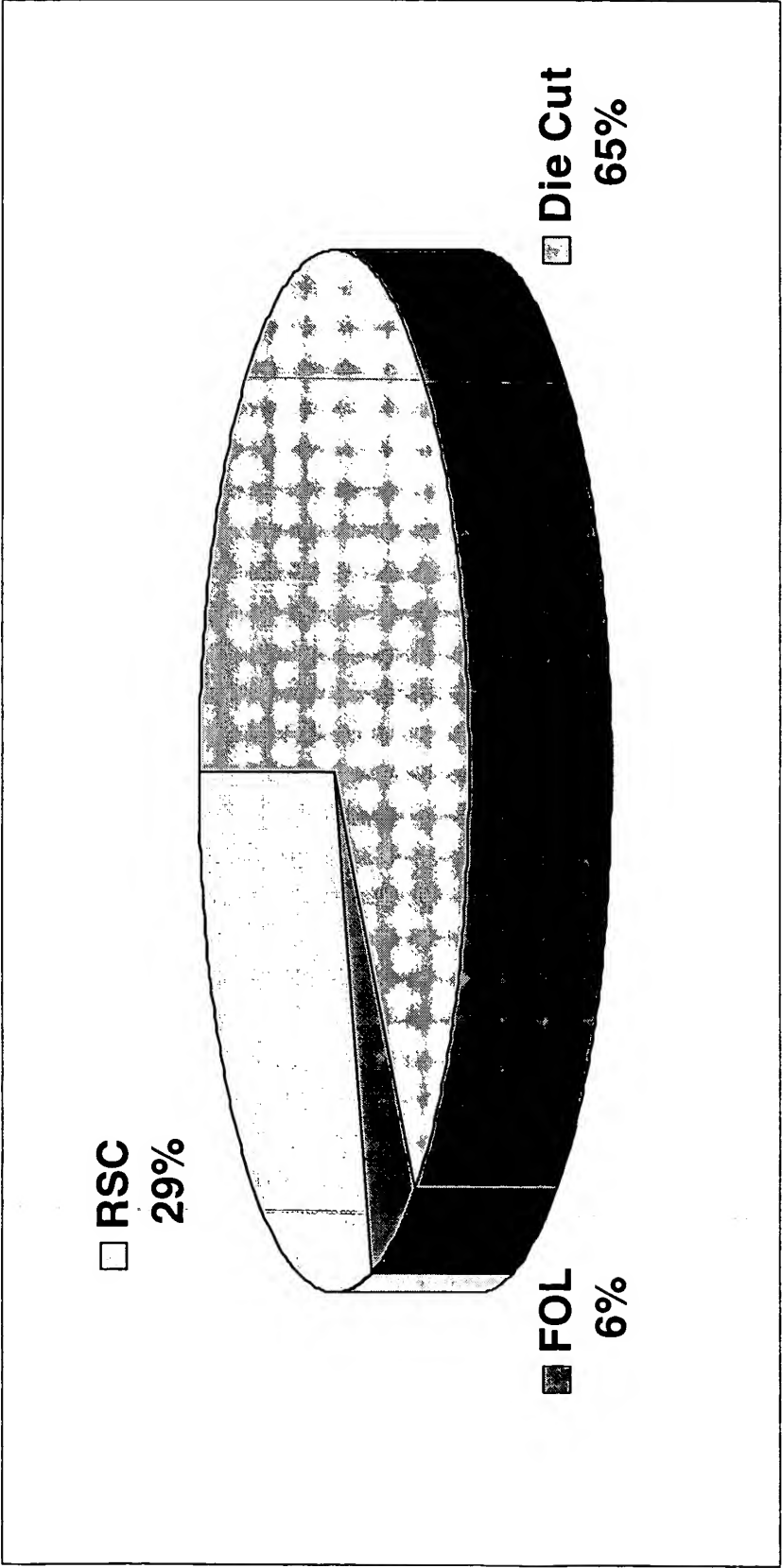


FIG. 36

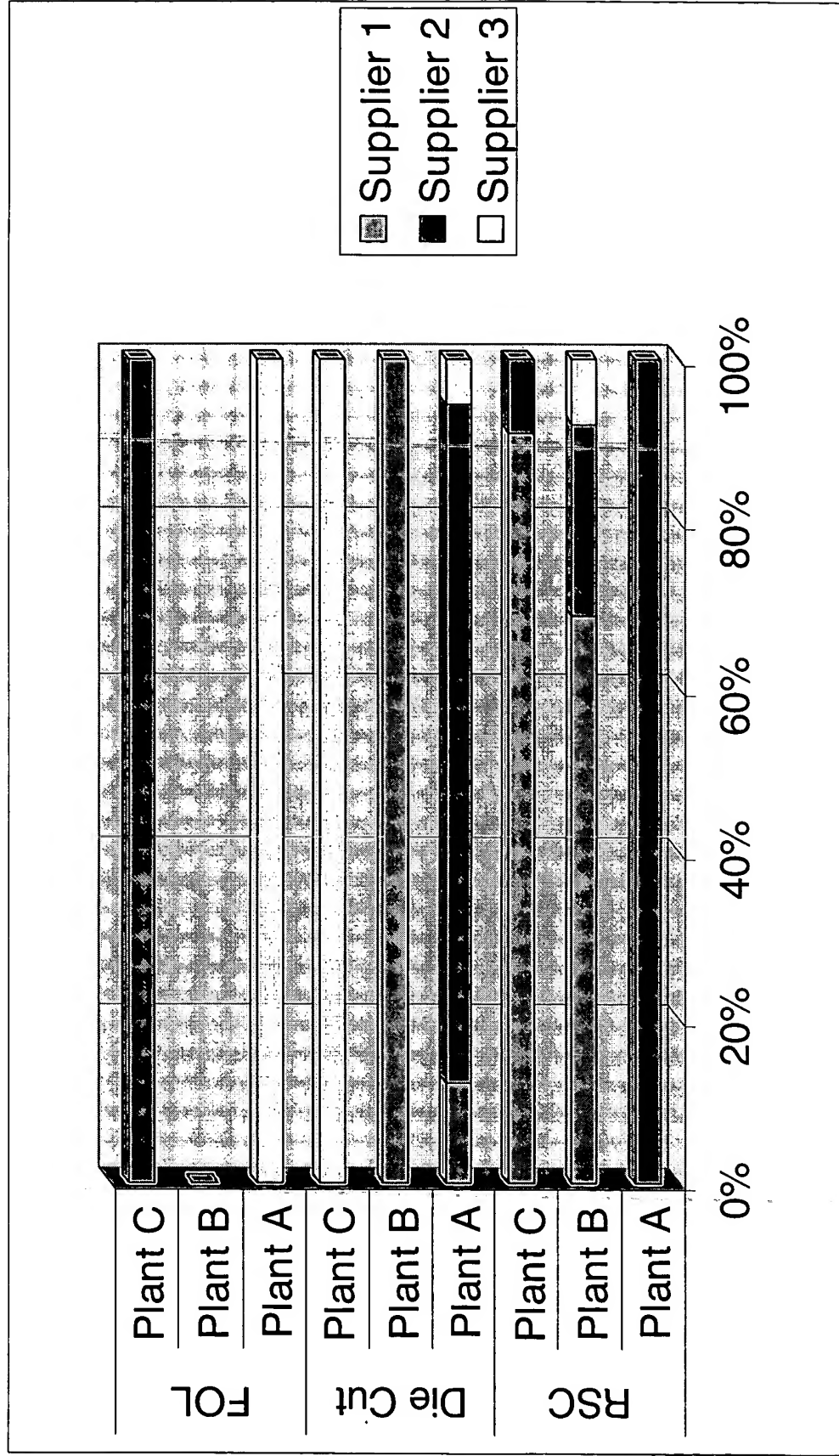


FIG. 37

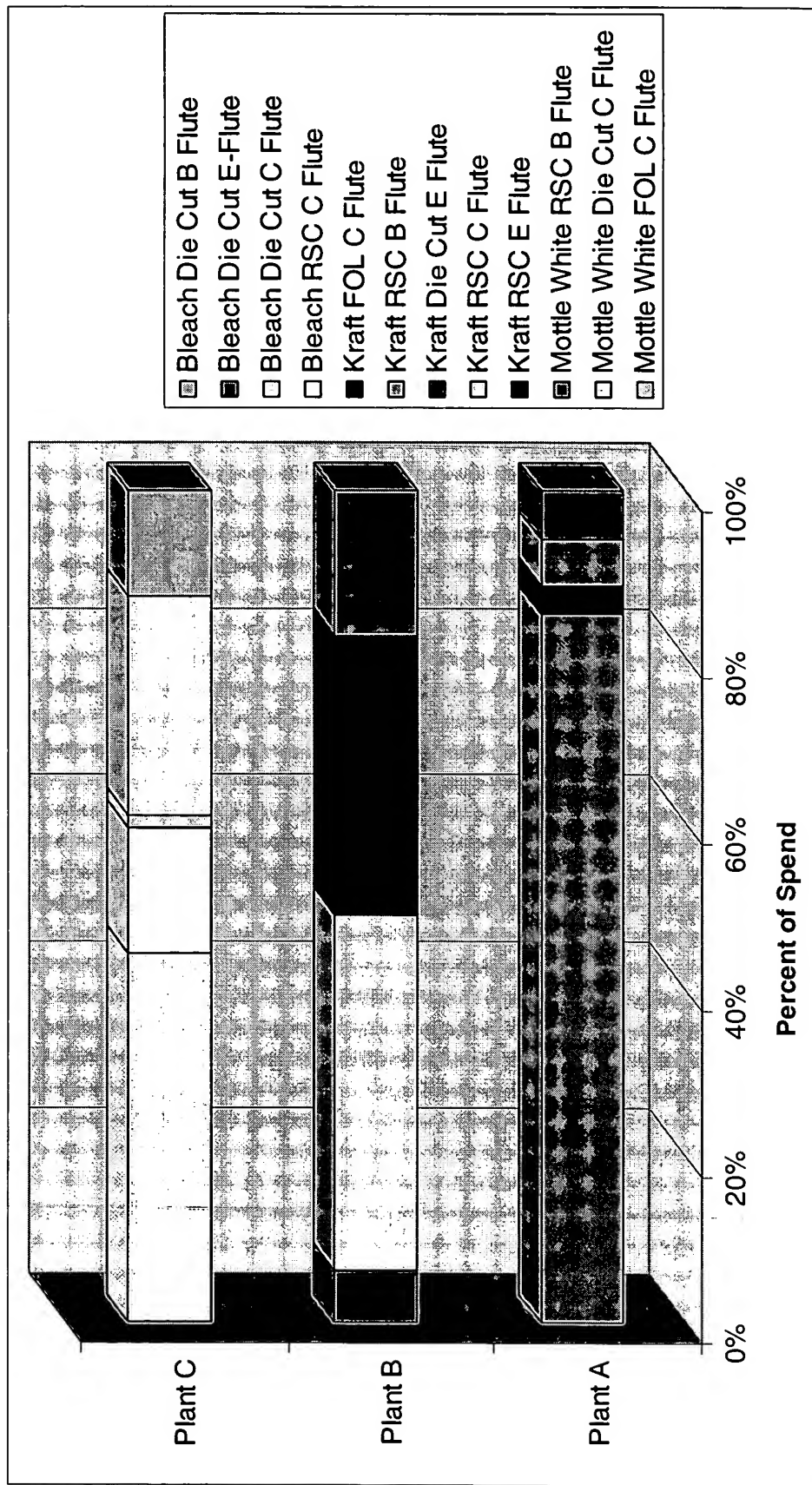


FIG. 38

TYPES OF TRANSACTIONS PER YEAR

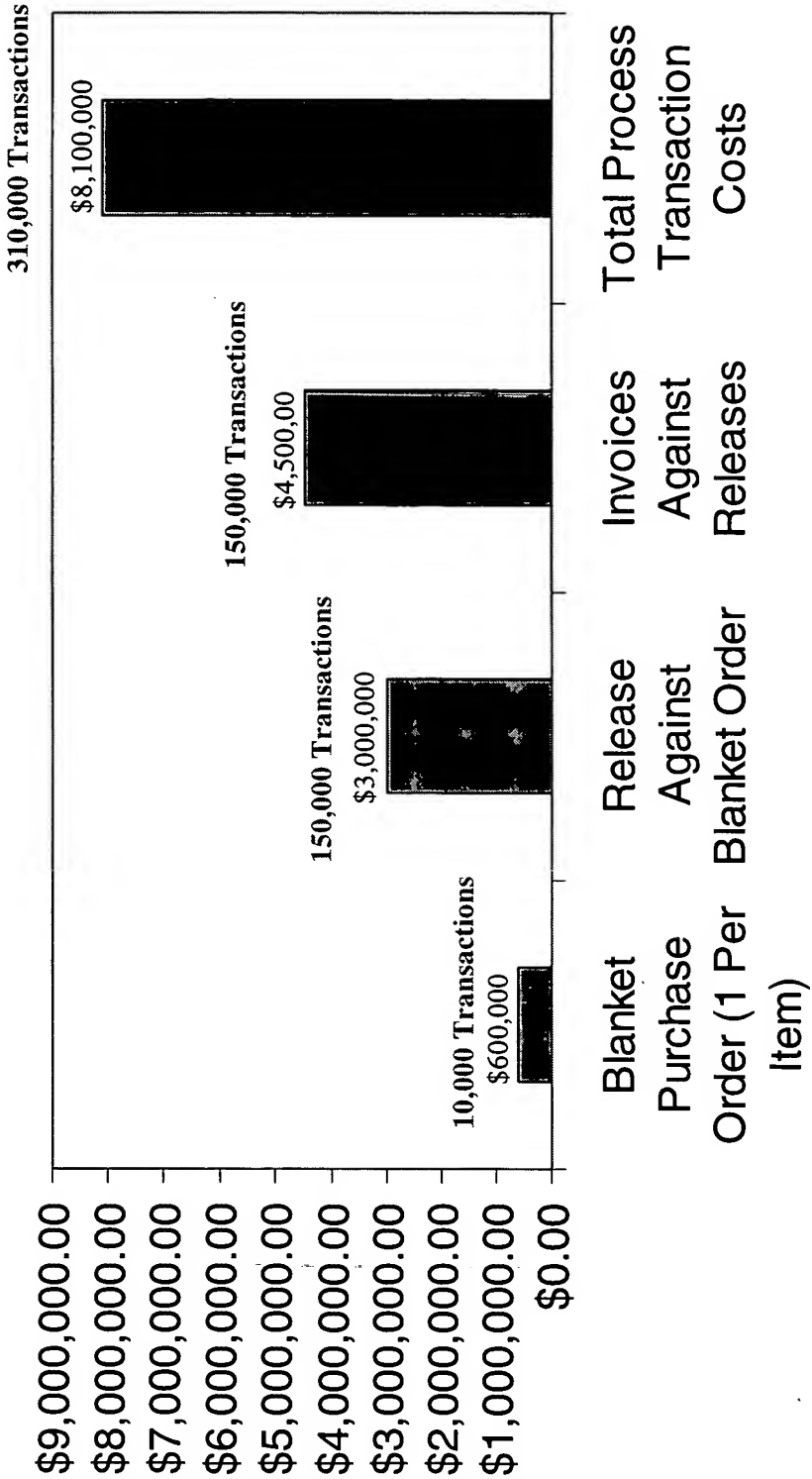


FIG. 39

280

US Shipments of Corrugated Packaging by Industry

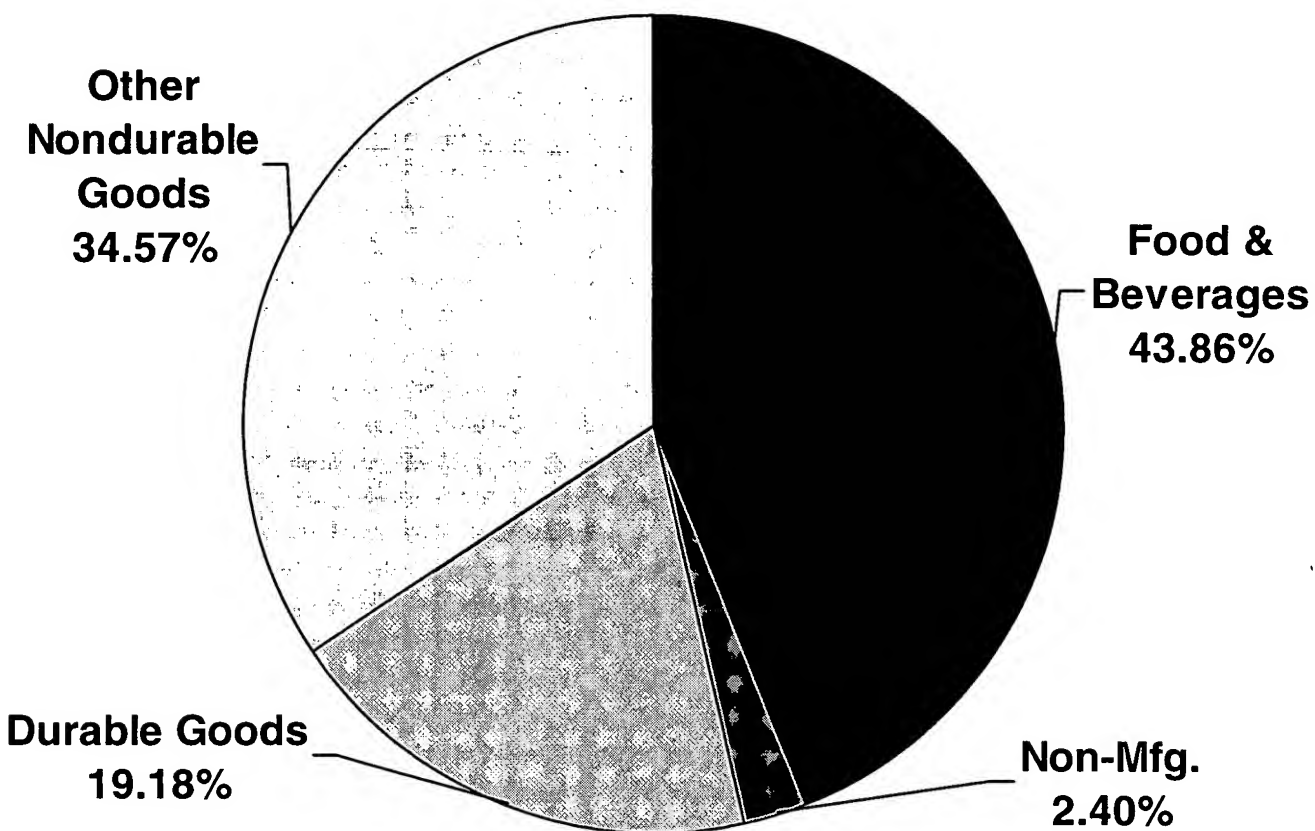


FIG. 40

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

282

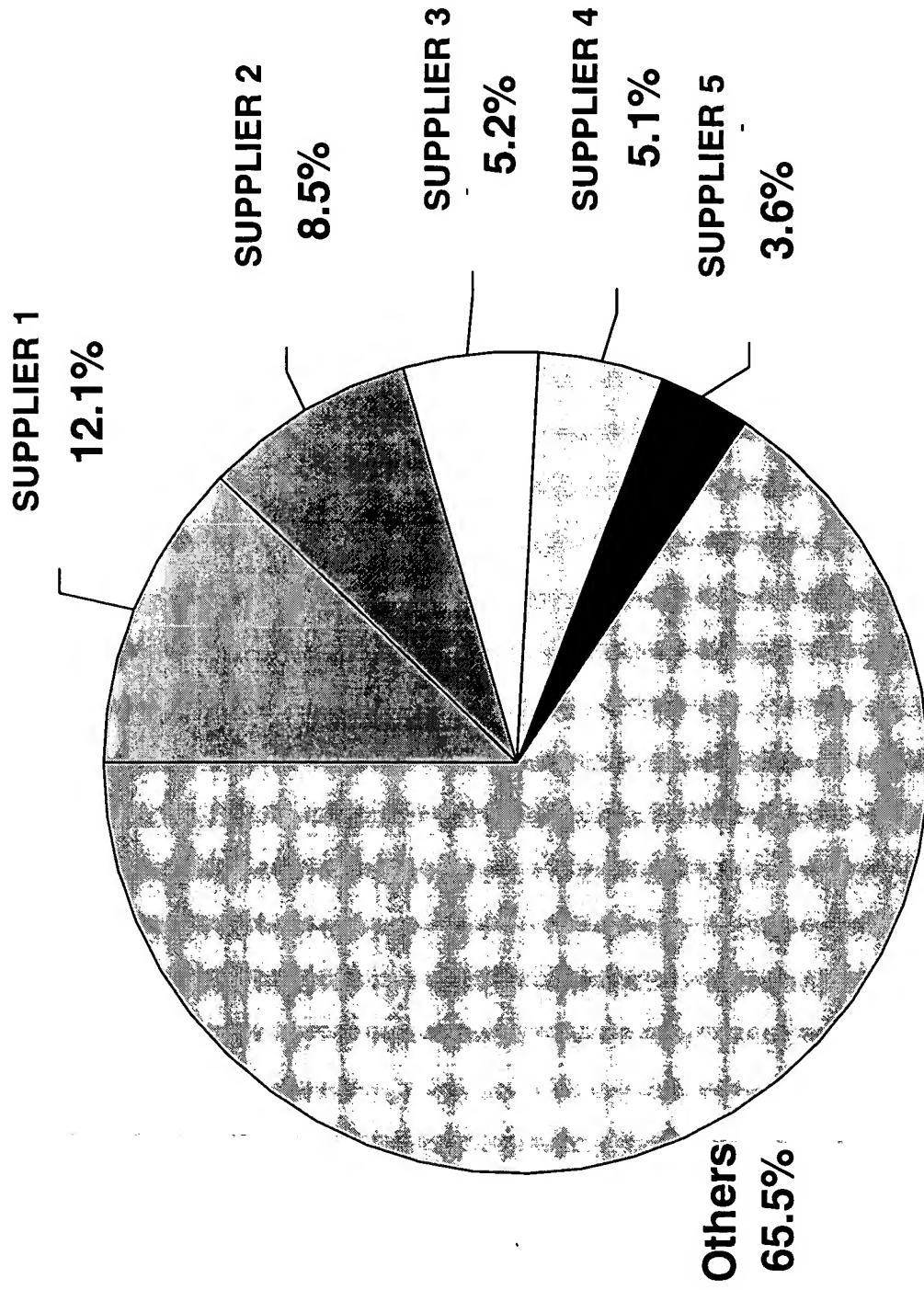


FIG. 41

Corrugated Box Shipments Forecast

284

Billion \$

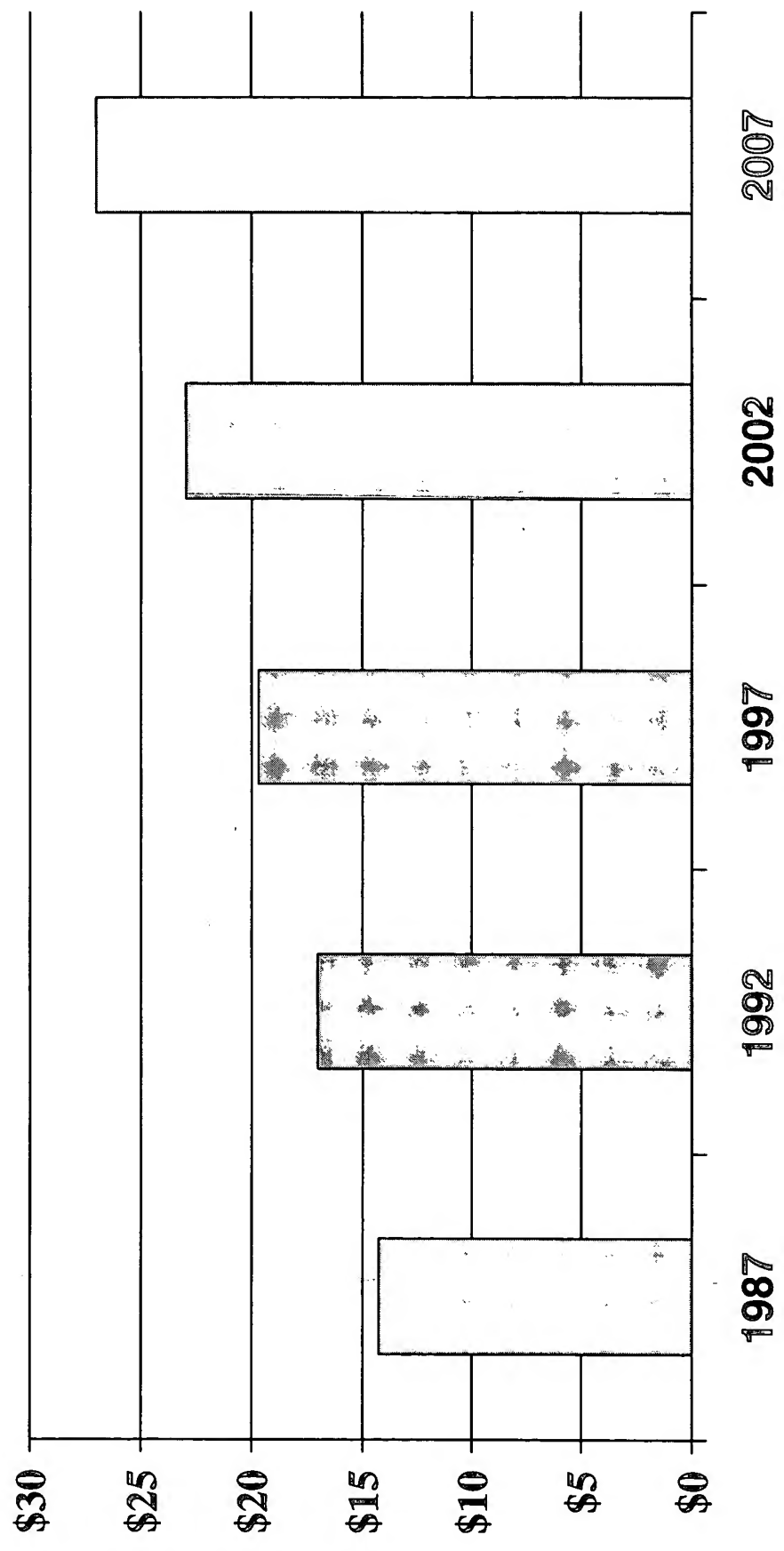


FIG. 42

RAW MATERIAL FORECAST VOLATILITY

Linerboard Market

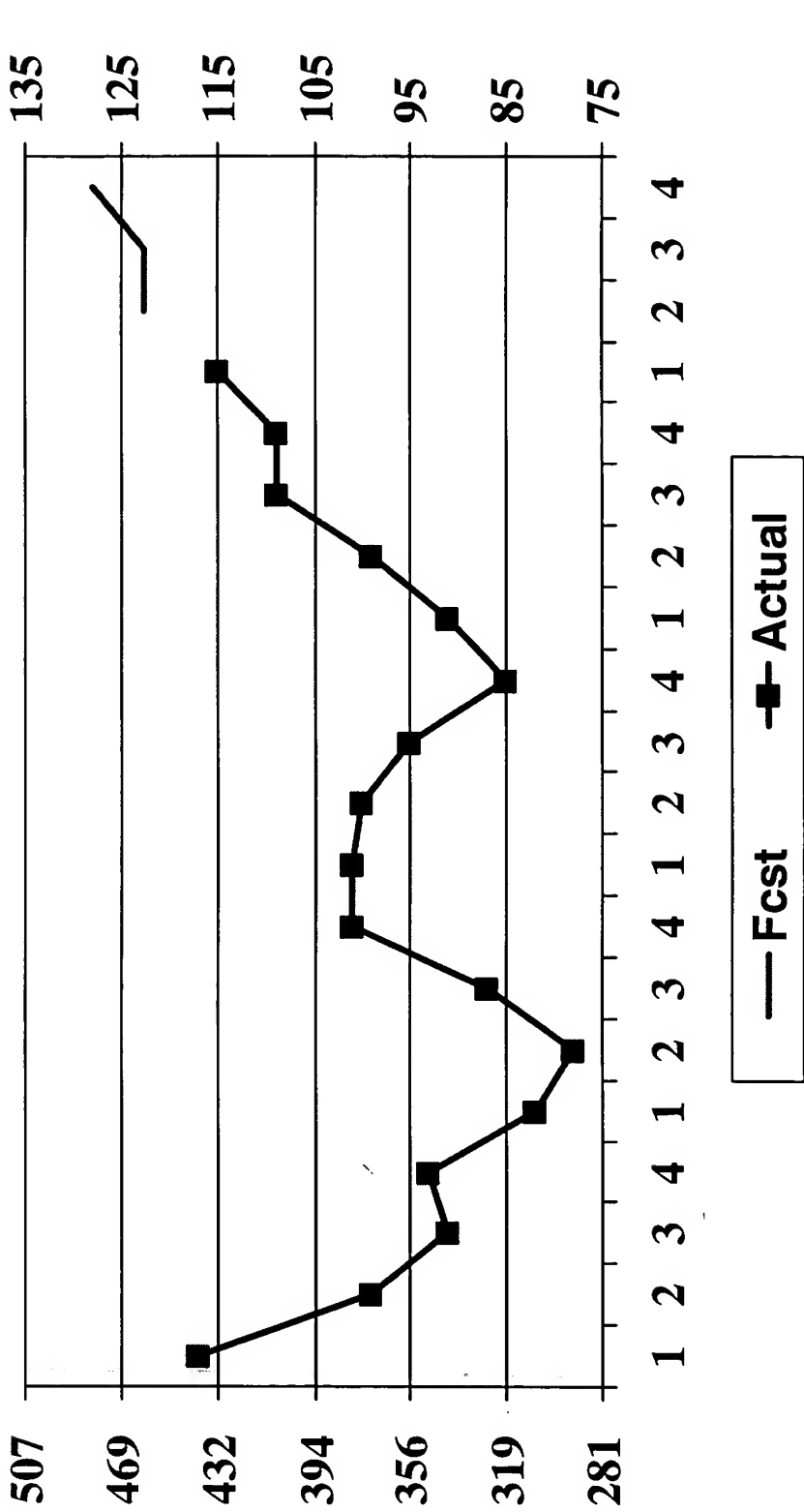


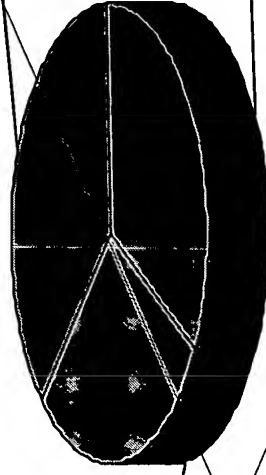
FIG. 43

Supplier A

1998 Financial Highlights

Sales Revenue	\$2,500
Net Income	\$82
Sales Growth 1 Year	5.5%
Sales Growth 5 Year	6.5%
Operating Margin	8.3%
Net Margin	2.4%
Employees	10,000

Product Segments



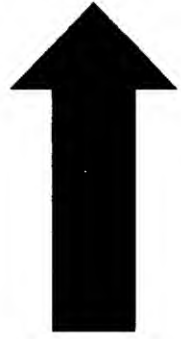
Operates 8 mills (corrugated medium, linerboard, market pulp, uncoated/coated freesheet). Total capacity of 3.3MM tons annually. 35 box and sheet plants in 20 states and Mexico. Total of 103 facilities in US, France, Mexico and Ireland. Integrated

Background - News

Known as a low-cost producer of paper. One of top 10 producers of fine paper. Kraft paper represents 5% of US production. Major converter/distributor of business forms. Top 10 US forest landowners. Purchased 11 corrugated plants in 1995

FIG. 44

Qualitative Evaluation Summary Results	
Suppliers	Points
Supplier A.	134
Supplier B	123
Supplier C.	104
Supplier D	100
Supplier E	94
Supplier F	89
Supplier G	86
Supplier H	79
Average points of all Suppliers 101.125	



- 1. Proximity & Ability to Serve 3M
- 2. Pricing & Cost Reduction
- 3. Supply Chain & Transactions
- 4. Quality & Manufacturing Capabilities
- 5. Design Capabilities
- 6. Management Support

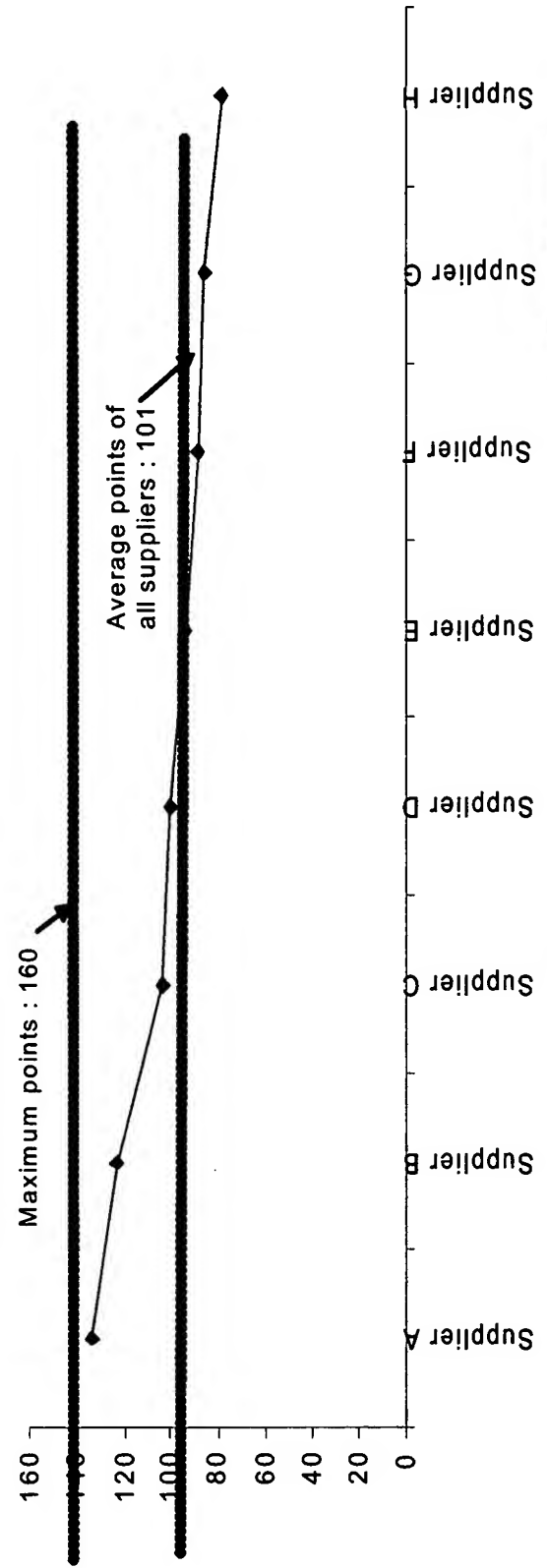


FIG. 45